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Railway Wages

IT was not to be expected that the combined wage claim of the three railway trades unions, lodged on July 30, could be granted in the present financial state of nationalised transport. The offer of the Railway Executive, of which some details are given elsewhere in this issue, falls short of the union demands and has been declared unacceptable by the union representatives, who have reported the position to their own executives. The next stage in the procedure, which the unions now wish to follow, is reference of the claim to the Railway Staff National Council, which meets next week; should no agreement be reached there, the claim would be referred to the Railway Staff National Tribunal. Although the unions' claim, if granted, would have cost the British Transport Commission £17-18 million a year, and the Railway Executive offer would involve additional expenditure of only some £9½ million, the Executive offer goes further than would appear, to meet the unions' case. This was based not only on the rise in the cost of living since the last railway wage increase in January of this year, but also on the higher wages in other industries, which have been attracting operating and other key staff away from railway service, and result in poor recruiting, with the serious consequences to railway manpower which have been discussed in recent issues of this journal. Whereas the unions demanded a flat increase of 10 per cent. for all grades, the Railway Executive offer embodies percentage increases varying from 4-4 per cent.

in the case of the minimum adult wage grade, to 16½ per cent. in the case of the Class 5 clerk aged 26. In the higher-paid wage grades, where the attractions of outside employment are felt the most acutely, the proposed increases fluctuate. Thus a goods guard in his third year would receive an increment of 15s. a week, or some 13 per cent., the largest percentage increase in the wage grades; a fireman in his first year would receive an increment of 10s., or 9 per cent., but a driver in his fifth year, of 10s. or less than 7 per cent. In addition, for the first time in railway history in this country, additional flat-rate payments are offered for full turns of duty booked to begin on Saturday afternoons. It is not clear how effective these proposals would be in stopping the drift from the railways, but they have been thought out by the Executive in the light of financial possibilities. Given the security of railway service and its perquisites, the offer must be attractive to many present and prospective railwaymen.

Winter Coal Prospects

THE latest estimate of the adequacy of coal supplies for the coming winter, given earlier this week by the Chairman of the National Coal Board, Sir Hubert Houldsworth, is optimistic. Output during the past three weeks, he states, has been encouraging, averaging some 200,000 tons a week more than a year ago; the miners' response to Saturday shift working has been good; and an additional 4,400,000 tons of deep-mined coal had been won this year. Against this, open-cast production has fallen by 1,000,000, and consumption has risen by 5,000,000 tons. Supplies this winter, Sir Hubert Houldsworth states, will depend on maintenance of the present rate of output, on economy in consumption, and on the ability of the railways to move the additional tonnage of coal. Regarding this last factor, the Railway Executive has long since taken every step within its power to ensure smooth working of coal and other freight during the next few critical months; these steps include the introduction of the reduced winter passenger services last Monday—an unprecedentedly early date. The main difficulty, however, is likely to be shortage of railway operating staff, a complex question to which the answer, as we have said before, is beyond the competence of the railways.

Taxation of Salaries

THE evils of the present high level of taxation are stressed by the Federation of British Industries in its memorandum published last week, the first of two, to the Royal Commission on the Taxation of Profits & Income. Regarding taxation of personal incomes, the memorandum emphasises the disincentive of high marginal rates of income tax, and comments that "more industry is coming under the control of salaried officers whose stake in the enterprise is relatively small and cannot be increased because of the weight of taxation upon their own salaries." The only solution of the problem of income tax, apart from a reduction in the level of taxation, it continues, is a reduction of the gap between the average rate and the marginal rate on higher wages and salaries. It is pointed out that in the higher classes of the Civil Service, the professions, and the arts, there are rewards for outstanding merit other than money income, which are lacking in industry, where material rewards must be the main incentive. In nationalised undertakings, however, and certainly in the railways, the remuneration of the higher posts often appears to have been fixed on a Civil Service basis without Civil Service compensations, and is below that of men of comparable achievement in other industries.

Burden on Industry

REGARDING the taxation of industry, the F.B.I. memorandum reiterates the demand for abolition of profits tax, which results in a disproportionate burden on company reserves and on ordinary shareholders. It also draws attention to some anomalies of taxation on the basis of a period other than that in which the taxable profits arise, of de-

preciation allowances based on the "historical" and not the replacement cost of plant, of stock valuations which do not recognise the fall in the value of money, and of the absence of depreciation allowances on certain classes of assets. Where excessive taxation results from these causes, it is pointed out, there is a danger that industrial capital is not being maintained; "it follows that it is fundamentally wrong that industry should need to raise fresh capital merely to preserve productive ability." If physical capital, the memorandum continues, is being dissipated because of an element of earnings being deemed profit and not, as it really is, replacement of capital consumed, there is an inflationary danger arising out of an existing upward trend in prices. Most of the present evils associated with taxation, it is considered, spring from the weight of taxation as a whole, "a consideration of which is altogether more important than any consideration of particular aspects of any part of that burden."

De-nationalisation of Road Haulage

THE intention of the Conservative Party to give an opportunity to former road hauliers, who had been driven out of the road haulage business by the present Government, to come back into it, was expressed by Captain Peter Thorneycroft in the last House of Commons debate on transport, as reported in our August 10 issue. The Road Haulage Association accordingly is taking steps to deal with the eventuality of de-nationalisation; these include a meeting on September 26 of its National Council to discuss the question of de-nationalisation, and a survey of former hauliers, their readiness to re-enter the industry, and the number of vehicles now operated by the Road Haulage Executive they would be prepared to buy, from which last it appears that a large proportion of former hauliers is willing to start again in the industry. That a considerable part, however, of Road Haulage Executive activities would remain in public ownership in the event of a change of Government seems clear from Captain Thorneycroft's statement in the debate that his party intended to re-organise publicly-owned road haulage—besides other forms of transport—in regional boards of administratively convenient size, although the functional Executives would be wound up as serving no purpose in the system which they proposed to set up.

Tourist Air Travel

THE possibility of greatly increased international air travel as the result of reduced air fares for holiday travel were referred to by Sir Miles Thomas, Chairman of British Overseas Airways Corporation, in his presidential address earlier this week to the annual meeting of the International Air Transport Association. Although he mentioned the economic limitations to further fare reductions, Sir Miles Thomas perhaps overestimates the market for international holiday travel, at least in Europe, where railway and steamer fares tend to be a deterrent to holiday-makers amid rising prices and heavy taxation; tourist air fares presumably will approximate to second class by rail. A further difficulty is that of peak traffic. Railways have the advantage of the elasticity of passenger train services which can handle heavy seasonal increases in traffic without any undue rise in costs; the same to a lesser extent is true of cross-Channel and similar steamers; but the limited capacity of aircraft must make the concentration of travel in a few weeks in summer and at weekends a serious economic problem. In Europe, air travel generally has offered the international passenger relatively speedy customs and other formalities, largely because of the spaced arrival at airports of units of limited carrying capacity. At peak traffic periods, however, air travel is already subject to delays from formalities, which would certainly be aggravated by any considerable holiday traffic.

Holyhead-Dun Laoghaire Service

THE satisfactory features of the conference held last week in Dublin between representatives of British Railways, of the Irish Government, and of other bodies con-

cerned in the Holyhead-Dun Laoghaire service, to the operating difficulties on which we referred in recent issues, are the recognition expressed by Mr. Sean Lemass, Minister for Industry & Commerce, that British Railways are not solely responsible for the efficiency of the service, and the decision to examine jointly the improvement of passenger accommodation at Dun Laoghaire and the provision of facilities to enable both sides of the pier to be used for embarkation; the latter work will greatly facilitate expeditious handling of passenger traffic, and although described by Mr. Lemass as a long-term matter, the attention now focussed on it should ensure its being undertaken in earnest. British Railways for their part have undertaken to see what more they can do to improve the service. The representation at the conference was wide, including the Corporation of Dun Laoghaire besides the tourist organisations, which no doubt helped to clear the air. Once the difficulties in the Holyhead-Dun Laoghaire services made themselves felt, British Railways were quick to suggest a meeting of all parties; the only pity is that this useful exchange of views did not take place sooner.

Extension of Train Buffet Services

FROM a survey of restaurant car usage made during the past two years the Hotels Executive has found that on many services the majority of passengers do not require the full-course meals provided today. For this reason restaurant cars are being withdrawn from 78 trains and a buffet service substituted which will allow light refreshments and snack meals to be served at any time. Restaurant car services on main-line trains will not be affected where experience shows clearly that such a change is unnecessary. Already a start has been made for the provision of new buffet cars and meanwhile existing restaurant car stock is being adapted to give buffet service. Apart from meeting a public need this scheme is expected to result in substantial economy in manpower and eventually to the elimination of losses on dining car services which amounted to £600,000 last year. Further, public demand for simpler and lower-priced meals is being met by extending the availability of packed meals at stations or on trains, while other amenities to be developed include the corridor service and the tray meal service for party travel. Further details of the new services are given elsewhere in this issue.

Report on Mechanical Engineering Research

WHEN the Mechanical Engineering Research Organisation was established in 1947 by the Department of Scientific & Industrial Research with the object of meeting and anticipating industrial needs its headquarters was in London. Since then it has moved to East Kilbride in Scotland and an account of the research work carried out during the ensuing years is given in a report published this week and referred to in greater detail elsewhere in this issue. An important branch of its work has been that on screw threads, which is of particular significance in view of the recent agreement with the U.S.A. and Canada on a common form of thread, while equally important experimental work has been that concerning fatigue in metals. Work on creep, the gradual increase in length of hot metals under load, has been tackled with a view to providing design data for such applications as steam and gas turbines. During the growth of the new organisation, states the report, the part played in the research programme by universities and technical colleges has proved of special value. Their investigations include work on the fundamental reasons for fatigue failure carried out in Bristol and research at Cambridge on fluid-flow problems.

Improved Locomotive Stores Equipment at Darlington

A BEGINNING in the re-organisation and improvement of the Stores Department of the Eastern and North Eastern Regions has been made in the re-equipment of the locomotive stores at Darlington Locomotive Works, of which some details are given elsewhere in this issue. The improvements take the form of new racking and binning,

with modified lighting, in the sub-stores in different parts of the works, and securely fenced compounds for items stored in the open. The new racking affords much greater accessibility to stores under cover—some of which formerly could be reached only by storemen clambering over the old racks—and a saving of one-third in floor space, and security for those in the open. The new lighting equipment and bright colouring of the racks are a welcome feature in the storehouses, some of which are over a century old, dating from early North Eastern Railway days. Further improvements in the Stores Department envisaged at Darlington and elsewhere include mechanisation.

Starting Against the Signal

DESPITE assertions by three trainmen to the contrary, Brigadier C. A. Langley, who inquired into the collision with safety siding buffer stops at Greenford on December 20, 1950, and whose report is summarised in this issue, was obliged to conclude that they were mistaken and that the autocar left the station against the starting signal at danger. The evidence of two of these men was in any case of little value, the driver's statement alone being of some consequence. Exhaustive tests failed to reveal the least thing wrong with the signalling apparatus and no room for doubt remained that the signal was in fact "on" when the car started. Although the semaphore oil lamps were much less bright than the L.T.E. colour-light signals close by, they were sufficiently visible, and no alterations in this respect are suggested in the report. Brigadier Langley thinks, however, that the driver had become so used to the regular routine at the place that he started almost instinctively on hearing the bell signal rung by the guard, without looking at the fixed signals, which he admitted to having seen to be correctly at danger some moments earlier.

Turning Full Circle

THE opening, in April, 1911, of the standard-gauge light railway from Lampeter, on the Carmarthen-Aberystwyth line of the G.W.R., to the holiday resort of Aberayron marked the culmination of many years of effort to secure railway facilities for this part of Cardiganshire. Unsuccessful schemes for a line to serve the district had included a 16-mile extension of the narrow-gauge Vale of Rheidol Railway, which would have provided a direct route to Aberystwyth. The G.W.R. anticipated the opening of the light railway by inaugurating a motor bus service between Lampeter and Aberayron, which speedily proved popular. A similar service was established subsequently along the coast between Aberayron and Aberystwyth. These bus routes are now operated by Crosville Motor Services, one of the undertakings owned by the B.T.C., and have displaced the light railway, which was closed to passengers this summer. There has thus arisen the curious position of a motor bus service dealing the death blow to a railway for which it paved the way. Had direct communication been established with Aberystwyth by the resuscitation of the abortive Vale of Rheidol scheme as a standard-gauge line, the railway's chances of survival might have been considerably brighter.

Wages, Prices, and Profits

WHAT action the Government intends to take regarding wages and prices in the face of trades union demands, and notably regarding the various wage claims both under review and impending is not clear from its spokesmen, including the Chancellor of the Exchequer. In recent issues of this journal attention was drawn to the irresponsibility of the trades unions, and especially of the Trades Union Congress, in flaunting their opposition to the policy of wages restraint, and accelerating inflation by pressing claims—with only the mildest exhortations, and in some cases without any exhortations at all to their members to increase output, which in present circumstances is almost the only justification for wage increases. We com-

mented on the T.U.C. demand for limitation of profits, and on the announcement shortly afterwards by Mr. Gaitskell of dividend limitation. The annual report of the T.U.C., published three weeks ago, insisted that the unions must try to maintain the real wages of their members by demanding wage increases, though it admitted that existing price and production controls could not prevent wage increases from being offset by increases in prices; it did not, however, consider that inflation was likely to result from these increases, but called on the Government to establish a new and more stable level of prices. In the light of these irresponsible utterances by the T.U.C., which claims to speak for some 8,000,000 workpeople, and of the recent failure of the Government to make any statement of policy in regard to the problems discussed other than Mr. Gaitskell's announcement of dividend limitation, it could only be hoped that the annual T.U.C. congress held at Blackpool last week, would elicit some statement from the Government, and that in the T.U.C. wiser counsels would prevail.

The main event of the congress, of which a brief account is given on other pages this week, was Mr. Gaitskell's speech. This consisted largely of an exposition of the economic situation, with its references to the effects of world rearmament, the necessity for reduction of imports and expansion of exports, for greater output of coal, and for more productive use of labour in many industries; Mr. Gaitskell made, however, one reference to the desirability for "more rapid and flexible methods on the railways," which needs clarification. On more controversial topics he said much which must have been unpalatable to his audience, such as his statements that high profits have not been an important cause of the rise in the cost of living, that the increase in dividends has been very much less than the increase in wages, that a high level of profits generally cannot be avoided "if demand is buoyant and turnover high, as they are bound to be with full employment," and that reduction of net return to shareholders by one quarter—which would be a far more inequitable and drastic step even than Mr. Gaitskell implies—would mean only three-pence in the pound more than the wage earner. He also asked for moderation in wage claims during the next few months, though he qualified his request by his statement that rigid wages restraint can be "dangerous" because it prevents "changes in relative wage rates when such changes are desirable." His approach to the question of wage increases implies acceptance of the fact that demands for increases are being, and will be, made. In his metaphor of the leapfrog of wages and prices, he was careful to add that at the end of it there might be some net gain to wage-earners. These qualifications of what might be timely warnings doubtless are due to Mr. Gaitskell's desire to state the matter fairly, but they betray his attitude and that of his colleagues to the problems concerned. His failure to do more than pay the usual lip service to the imperative necessity for increased production—or harder work—was also due perhaps to dislike of exaggeration. His otherwise useful allusion to the fears that have hitherto bedevilled production and resulted in restrictive practices, fears on the part of the employee of unemployment or of the use of machinery, were offset by unnecessary references to fears on the part of employers of better methods and of learning from one another, unnecessary because few employers today can afford anything but the highest possible output where circumstances allow. Apart from a tentative suggestion regarding partnership by employees in individual concerns through distribution of bonus shares reflecting the rise in undistributed profits, Mr. Gaitskell had few concrete suggestions to make. Nor did his speech reveal any disposition on the part of the Government to deal firmly with the question of wages, apart from being at the disposal of the T.U.C. for discussion of the problem, which could not be solved without the T.U.C. acting for industrial labour as a whole.

The congress, no doubt because the main achievement of the T.U.C. this year has been the imposition on the Government of dividend limitation, achieved little. Despite Mr. Gaitskell's speech, the arguments in the wages debate were in favour of increases in real wages to be secured by

price controls or subsidies. It was not stated, however, precisely how these were to be applied, and unless the T.U.C. again puts considerable pressure on the Government, it seems unlikely that anything will result. Nor do the other items of the five-point programme summarised in our account of the congress seem to be more than academic, though the subject of control of profits may continue to be raised for some time. The defeat by a large majority of one of the resolutions on wages, initiated by a largely communist union, was largely political; the resolution declared that further wage increases were essential and that living standards must be improved at the expense of profits.

Although the congress advocated little that could be described as positively harmful, its proceedings make depressing reading, showing it to be incapable of interpreting facts even when they are accepted. It has done nothing to help increase productivity, and contributed nothing useful to the question of wages and profits.

Winter Train Services, North Eastern and Scottish Regions

IN the North Eastern Region, an acceleration by 5 min. of the 3.57 p.m. (previously 4 p.m.) from Newcastle to Birmingham introduces a run over the 44.1 miles from Darlington to York in 42 min., at 63.0 m.p.h.—the fastest start-to-stop run ever scheduled between these points: In addition, the 1.35 and 8.45 p.m. expresses from Darlington make the same journey in 43 min. (61.6 m.p.h.), the 8.44 a.m., 1.51, and 5.23 p.m. in 44 min. (60.2 m.p.h.), and the 10.50 a.m., 11.34 p.m., and 12.20 a.m. in 45 min. (58.8 m.p.h.). In the down direction, against the gradually rising tendency of the road, the 5.4 a.m., 9.32 a.m. ("North Briton") and the 1.30 p.m. are allowed 45 min.

Apart from the usual seasonal withdrawal of long-distance services on the East Coast route, this winter there is no regular timetabling of such week-end trains as the 9.30 a.m. from Kings Cross to Newcastle on Mondays and Saturdays, the corresponding 12.15 p.m. from Newcastle to Kings Cross on Fridays and Saturdays, and the 3.10 p.m. Kings Cross-Newcastle and 4.20 p.m. Newcastle-Kings Cross on Fridays. The "Flying Scotsman", which through the summer has been running on a 7 hr. 38 min. schedule between Kings Cross and Edinburgh in each direction, is slowed down to 7 hr. 50 min. As compared with last winter, however, the down "Royal Scot" is due in Glasgow Central at 6.10 instead of 6.35 p.m., a gain of 25 min.; the long-continued stop at Symington is omitted. The southbound "Royal Scot" stops at Carlisle Citadel as now customary in winter, and retains its summer 8 hr. schedule from Glasgow to Euston.

The Perth portion of the down "Royal Scot" is due in Perth at 8.12 p.m., 11 min. earlier than last winter, but still fails to connect with the 8.10 p.m. from Perth to the Highland Line. Through passengers from Blair Atholl, Pitlochry, and Dunkeld for London have no difficulty in making the through journey in a day, but it is unfortunate that they are prevented from doing the same thing in the reverse direction by no more than 2 min. All up timings are slightly eased between Forfar and Perth, even to the extent of starting the southbound "West Coast Postal" from Aberdeen at 3.27 instead of its time-honoured 3.30 p.m. departure. The fast timings over the main line between Carstairs and Carlisle remain, however, including 75 min. for the 73.5 miles by both the 9.30 a.m. and 1.30 p.m. ("Midday Scot") from Glasgow, and 68 min. for the 66.9 miles from Symington to Carlisle by the 1.45 p.m. from Glasgow to Manchester and Liverpool.

The 11.15 a.m. from Birmingham to Glasgow is accelerated 18 min. as compared with last winter, reaching Glasgow Central at 6 p.m.; 14 min. of the acceleration is between Carlisle and Glasgow. On the Dumfries main line, also, the 11.8 a.m. (previously 10.45 a.m.) semi-fast to Glasgow (a through train from Newcastle) is accelerated 18 min., reaching St. Enoch at 2.22 p.m. Among last winter's trains which are withdrawn this winter are the "Fifeshire Coast Express" (4.7 p.m. from Glasgow

Queen Street to St. Andrews and 7.14 a.m. from St. Andrews to Glasgow); also the 11 a.m. from Edinburgh Waverley to Glasgow Queen Street and the 7 p.m. in the reverse direction.

Glasgow Buchanan Street and St. Enoch are closed on Sundays, as in last winter's timetable. Buchanan Street traffic is dealt with at Queen Street, and St. Enoch traffic at Central.

Both the North Eastern and Scottish Region timetable changes include a considerable reduction in restaurant and buffet car facilities. The most notable of these withdrawals are of the cars which have run for many years past between Glasgow Queen Street and Fort William (by the West Highland line) twice daily in each direction, and once daily in each direction between Aberdeen, Elgin, and Inverness, though on other lines in the Highlands the cars between Inverness and the Mound and Helmsdale (on the Farther North line), Inverness and Achnasheen (Kyle of Lochalsh line), and Glasgow and Oban, as well as the services between Glasgow, Perth, Aviemore, and Inverness, as yet remain unchanged. All buffet cars are also withdrawn between Leeds, York, and Scarborough, York and Hull, and from the 8.30 a.m. York-Newcastle and the 12.7 p.m. Newcastle-York via Sunderland and Stockton; there is a reduction in the restaurant car service between Glasgow Queen Street and Edinburgh Waverley, and the Glasgow Central to Edinburgh Princes Street cars (eight services daily) were taken off some months ago. There is no longer a breakfast car between Carstairs and Perth on the 10.50 p.m. sleeping car express from Euston, nor, as far as Carstairs, a luncheon car on the 12.14 p.m. from Perth to London; also the car from Glasgow to Carlisle on the 5.40 p.m. train is withdrawn.

This policy seems to conflict with the publicly stated aim of the Railway Executive to provide refreshment facilities on all long-distance trains, and the loss on such a route as that between Glasgow and Fort William, with no possibility of obtaining food for 4 to 4½ hr., apart from a meagre 5 min. at Crianlarich, seems particularly serious. Consideration might be given to a buffet service on some lengthy journeys—perhaps where patronage is small, a buffet car of the Continental type, in which only half the car is taken up by kitchen and a small amount of restaurant seating, and the remainder is given over to compartments, and which can be manned by a staff of only two. In view, however, of the losses sustained recently on ordinary restaurant-car workings, it was not perhaps to be expected that the services could be continued during the winter months when traffic is light. No doubt new refreshment facilities will be offered when available.

C.N.R. Freight Handling

REPORTS that a shortage of box cars was responsible for difficulties in moving the bumper grain crop of Western Canada have been vigorously denied by Mr. Donald Gordon, Chairman & President of the Canadian National Railways. The difficulty confronting the railways was not in accepting the grain for shipment, but in getting rid of it when the rail haul was completed. Throughout April, May, June, and July the C.N.R. moved a daily average of 508 box cars from the Prairies, a quantity that surpassed the quota set by the Canadian Wheat Board. Congestion in lakehead terminals developed to the point where there were 2,400 box cars in the yards awaiting unloading; the average number detained during July was about 2,000.

Clearly it was uneconomic in normal circumstances, said Mr. Gordon, to use box cars as warehouses on wheels, and anything but helpful to the available supply of box cars to have them "tied up" when the railways were hard pressed to meet the demands for moving not only wheat but other important commodities. To avoid aggravating the congestion it had been necessary to adjust the loading of cars at prairie points, but to describe this situation as a shortage of box cars for which the railways were responsible was hardly accurate. The C.N.R. now had in the Western Region in readiness for the new crop and all other

traffic offering some 24,000 empty box cars, 37 per cent. of the total number of box cars in Canada.

Using 1928 as a base period, the Canadian National Railways have carried 40 per cent. more net ton-miles of freight with 13 per cent. fewer locomotives and 13 per cent. fewer freight wagons of all types. Measured by the average freight train speed, service was improved by 24 per cent. Because of improvements in the design of rail and treatment of sleepers on main lines, the tonnage of new rail laid last year was reduced by 36 per cent. compared with 1928, and the number of sleepers installed was down 54 per cent. Each ton-mile carried required fewer man-hours. "We not only carried more freight faster, but we used relatively less of manpower and materials and equipment, and I cite this as indicative of progress in the Canadian railway industry. This is an era in which change is itself part of normality," continued Mr. Gordon, "in which we must move faster and faster even to stand still." Railway management and employees had to be prepared to reject outworn methods and outmoded ways of thinking, and be willing to seize every opportunity to use the products of scientific knowledge. Any serious threat to the long-term existence of the railways arose from the habits of mind induced by a long history of close and exacting restrictions over what railway management could and could not do in adjusting services to changing conditions.

If speed were unimportant, stated Mr. Gordon, economical operation would dictate an average freight train speed of about 15 m.p.h. The public wanted not simply speed, but speed at a price, and that as low as possible. Along with the search for engineering improvements to avoid the penalty of higher cost, an attempt was being made to strike a balance in the type of service provided. The integration of industrial processes with shortened working hours, meant that more had to be accomplished in a given time, suggesting that throughout the transport service the standard of speed would be raised.

Mr. P. R. Hickman

EARLY next year Mr. Percy Reginald Hickman, the Chief Officer for Stores of British Railways, will retire on completion of 46 years' service in the Stores Department. Mr. Hickman started at the bottom in the Midland Railway and rose to be the head of the combined stores organisation for all the railways. He is one of the greatest practical storekeepers in the country, and also one of the most modest. During the war Lord Hurcomb called on him to take charge of sea transport stores in the Ministry of Transport and in that capacity he visited the principal ports of the world. Quite apart from the arduous work of organising shipping stores, his long journeys abroad were a test of endurance. On his return to railway service in 1946, the L.M.S.R. received a fine tribute from Lord Hurcomb for his work at the Ministry. Much earlier in his career, Mr. Hickman had to undergo an even greater test of character. Whilst occupying a relatively minor post in his department he was appointed a member of a committee of two to examine the purchasing arrangements and decisions in his own department! It may be left to the imagination what an unpleasant and nerve-racking job that would be to him.

The qualities which have made Mr. Hickman a first-rank storekeeper may be summarised thus: (a) He is incorruptible. (This is the first qualification for stores purchasing.) (b) He has immense practical knowledge of stores. You can take him round any railway factory or store and you will find it very difficult to point to one article which he cannot name or indicate its use. (c) He has great organising ability. (d) He is methodical—so essentially necessary in storekeeping. (e) He has great courage and is not afraid to express unwelcome views. (f) He is always willing to help. (g) Last, but by no means least, he is friendly.

There is probably no need to say more, except that all who know him will wish Mr. Hickman well in his retirement.

A. J. P.

The Problem of First Class Travel

(By a Correspondent)

IN the midst of other anxieties British Railways will have to consider some awkward questions which arise from the decline in first class travel. In 1937 the former railway companies carried 1,295 million passengers, of whom 48,354,000, or 3.7 per cent., travelled first class. By 1947 the number of passengers decreased to 1,077 million, of whom 33,116,000, or 3 per cent., went first class. Since nationalisation, the volume of passenger travel on British Railways has declined, with a particularly sharp fall in first class journeys. The table below gives details for the years 1948-49-50 and for the five months to May, 1951, and shows for each entry the percentage decrease from the previous period.

PASSENGER JOURNEYS ORIGINATING : BRITISH RAILWAYS

Period	Total (millions)	Decrease, per cent.	First class journeys	Decrease, per cent.
			(000's)	
1948	996	7.5	29,290	11.6
1949	993	0.3	27,237	7.0
1950	982	1.1	25,071	8.0
1951	394	—	10,388	3.0
(5 months to May)				

Revenue from first class travel has decreased faster than the number of passengers. In 1949 takings were down 14 per cent. In 1950 they were 11.6 per cent. below 1949 and in the five months to May, 1951, there was a further fall of 6.8 per cent., compared with the same months of 1950. The tendency is for average takings per journey to diminish, both for all classes of travel and for first class travel.

In the light of these facts it is surprising to find that during the past two years the Railway Executive has increased the number of first class seats in passenger coaches (excluding restaurant cars) by 9,100, or 3.8 per cent., and the number of third class seats by 73,600, or 3.4 per cent. Roughly 10 per cent. of the seating accommodation is earmarked "1st Class." In 1937 the proportion was 12½ per cent., but the railway companies, partly for the sake of prestige, then catered somewhat lavishly for the higher class business. In 1950 the volume of that business was nearly 49 per cent. lower and, on some sections of line, first class compartments were often hauled empty for long distances.

The fitting of the supply of first class seats to demand is a Regional problem. In the first five months of this year, the Southern Region originated 129,000 more first class journeys and the Western 15,000, whereas the London Midland Region lost no fewer than 372,000 journeys, the Eastern 47,000, the North Eastern 28,000 and the Scottish Region 27,000. If these trends continue, it should be practicable to reduce the first class accommodation allotted to four of the six Regions and to save a considerable amount of empty seat mileage. Presumably the first class vehicles included in this year's carriage building programme are needed as replacements. An article in *The Railway Gazette* of December 1, 1950, stated that during 1951 it was planned to construct 1,189 standard passenger coaches, and gave a list of types, but not the number of first class seats.

MORGAN CRUCIBLE CO. LTD.—Group trading profit of the Morgan Crucible Co. Ltd. for the year ended March 31 expanded by £382,414 to £1,612,433. With the addition of investment income, total profit was brought up to £1,660,336, compared with £1,263,128. Group profit, before taxation, was £1,516,976, compared with £1,135,946. During the year productivity showed an increase of 16 per cent. above the average of the past three years. The increased sales turnover is attributed to a growth in volume of sales as opposed to increase in prices. The balance sheet shows that current assets have risen from £4,036,543 to £5,378,342, with current liabilities and provisions at £1,398,616, compared with £1,326,612.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

The Status of Transport

August 18

SIR,—It is not my practice to criticise articles in house or company magazines, as they are domestic concerns, but the Summer 1951 number of *Progress*, with sub-title *The Magazine of Lever Brothers & Unilever Limited*, has an article, certain parts of which were mentioned in the House of Commons on July 30, and which contains implications:

- (i) that industry and commerce create wealth but transport does not; and
 - (ii) that they sustain the community financially and materially but transport does not;
- and positive statements:
- (iii) that transport is not a primary industry and never will be; and
 - (iv) that the user of transport provides the traffic and the revenue and the (provider) the service.

The author does not define his terms, so I take them as having the usual meanings.

First, as to creation of wealth. Transport is no less a creator of wealth than other forms of industry and commerce. It creates a form of wealth best described as movement-over-distance-in-time, essential in a much wider sense than merely to industry and commerce; that is, to the national life as a whole. Without transport, wealth would not be wealth, but only potential wealth. Coal can be dug by human labour without "industry" in the sense used in the article under notice, but it is not wealth until it is transported to the place where it is to be burned; fish in the sea become wealth only when transported to land and to consumers. As I have often stated, the wealth created by transport is different from other kinds of wealth in as much as it is consumed in the process of production; it cannot be stored if not used at the time of production, like soap or margarine. It is none the less wealth. Not used it is wasted for ever.

Second, without transport the community cannot be sustained, any more than the body without its circulatory system, even in primitive societies.

Third, transport is decidedly one of the great primary industries, in the service of the people as a whole and not merely of industry and commerce. It has been said that transport is the handmaiden of industry; it is much more than that. It is one of the greatest primary services. The handmaiden theory completely ignores all the traffic, passenger and freight, with which industry and commerce have no direct concern whatever. When used in arguments designed to put the burden of increased charges on to passenger traffic instead of freight, it is in direct conflict with the interests of the travelling public.

Fourth, the claim that the user of transport provides the traffic and the revenue and the provider (of transport) the service, stated in that order and by implication, is misleading. Even if the providing were in that order—which it certainly is not, but the opposite—the plain fact, and the cause of much difficulty in the transport services, is that services have to be provided whether or not the traffic and the revenue are there. Indeed, it is a matter for legitimate complaint that industry and commerce insist on the provision of services, yet deny to the providers of those services traffic, and consequently revenue, which is available and carrying it themselves. Every ounce of traffic carried by S. P. D. Limited (Lever Brothers' carrying company) is denied to the public carriers. To state this fact is not to imply any judgment of right or wrong, wisdom or otherwise, but it will not be denied that it has exceedingly important implications concerning services provided and not used, and certain Members of Parliament have not been slow to take advantage of the article in *Progress*. The cost of services provided but not used, within the orbit of the British Transport Commission, is borne by a public corporation—that is, by the British public.

For many years, industry and commerce have demanded

of the railways things only justified under conditions of monopoly, and, in growing measure, have maintained the right to contract out whenever the monopoly conditions did not suit. Such freedom is only just in a perfectly free market. As *Progress* says, industry and commerce can shut down services which do not pay—a freedom denied to the railways hitherto, and one largely responsible for the present chaotic conditions.

The British Transport Commission, like the railways before its establishment, has its faults, but, again like the railways, has not yet been given a fair crack of the whip. What does *Progress* require in transport—complete freedom or complete monopoly?

Yours faithfully,

FREDERICK SMITH

65, Hollowell Road, Northwood

Economics of Long-Distance Electrification

August 31

SIR,—Mr. J. C. Read, in your August 24 issue, referring to Mr. S. A. Vincze's letter, overlooks the fact that when discussing the relative merits of experience available with different manufacturers of electrical equipment also the export trade has to be taken into account. There is no 3,000-volt electrification in England, yet there are English firms thoroughly conversant with this mode of traction from, for instance, Poland, where also Swedish firms are working. Switzerland is mainly using 16½ cycles but Swiss firms have carried out admirable work for France and Holland where 1,500 volts d.c. has been used.

Mr. Read also draws attention to the fact that Mr. Vincze is supposed to have based his comparisons on "continental (and pre-war) prices." In times like these we are now going through, when, for instance, American prices for traction equipments have risen some 40 per cent. on an average in the last five years and currency regulations and devaluations cause permanent instability, a comparison based on present price value will not be fair as far as the correct choice of system is concerned. It is also true that at the moment no British firm has practical experience of present-day a.c. electrification at 16½ or 50 cycles, but this will not remain for ever as the export market in the Dominions will no doubt call for a.c. equipment. Your correspondent correctly points out the high standpoint of British traction manufacture where d.c. is concerned and it is of vital interest to all concerned that a similar position is obtained also with regard to a.c. without undue delay.

The correct system of electrification is the system that leads to the highest percentage electrification of the railway in each particular country. From this point of view 3,000 V. d.c. has been as good in Italy as 16½ cycles in Switzerland and Sweden. Third rail and 600 V. d.c. has served the Southern Region well but 1,500 V. d.c. allows only a limited part of the traffic to be electrically worked in France. Conditions are the same in Great Britain according to the British report "Electrification of Railways" referred to by Mr. Read; the choice, if adhered to, can never lead to anything like 100 per cent. electrification.

Staff shortage, smoke nuisance, high fuel prices, are all circumstances that call for a more efficient method of running railways than by steam, and this call is just as loud, if not even louder, from lines with light traffic. The choice must therefore be such as to allow a uniform system throughout and the boon of electrification must also be within the reach of branch lines. Here 3,000 V. d.c. shows little advantage over 1,500 volts; hardly anything would be gained by adopting the former as a standard for England as the rolling stock would be more costly, heavier, and more complicated than even with high-tension a.c.

The comparison between the cost of electrifying according to different systems contained in the British report is said to be based on purely British practice and there, natur-

ally, systems not so far introduced in an up-to-date form will show up to disadvantage. If British firms took up also a.c. electrification in their production line the picture would change considerably, and no doubt come in line with that experienced in other countries with considerably lower costs for overhead line structures and substations.

Finally, Mr. Read appears not to be conversant with the possibilities of dealing efficiently with telephone interference on a.c. electrified lines with overhead telephone circuits, but why take up this point for discussion at all, as no up-to-date telephone system will use overhead circuits anyhow? With the expansion of telephone communication now taking place the underground cable is in any case the only economical and technical solution for the future, and it is only a question of suitable arrangements for older systems until such time that they will eventually go underground by their own accord.

Yours faithfully,

H. OFVERHOLM

Asea, Västerås, Sweden

Higher Passenger Fares

August 9

SIR,—Your correspondent, Mr. Dewhurst, in your May 11 issue, deserves a medal for drawing attention to the failure of the British Transport Commission to propose a reduction of the high single fares charged on the railways.

It is amazing that whenever fares are mentioned in Parliament there are always loud demands for more cheap excursion tickets, but no reference to single fares, which, being standard charges, should surely be Parliament's chief concern in the matter. It looks as if a great opportunity is going to be missed. Now that so many bus companies are having to increase their fares, there is an ideal chance to get them to introduce the London Transport principle of returns at double the single fare, as the general, though not necessarily exclusive, rule. Similarly, if the single fare by rail was made half the proposed monthly return fare, we should have made an important step towards the much talked-of integration of transport. The railways could still issue day returns at fares competitive with local bus fares. Single fares by rail would still be higher than by bus, but would be reasonably comparative, bearing in mind the different conditions of carriage.

The evil of the present system can be seen in full at any suburban station on a Sunday evening in summer. When there are long queues at the bus and coach stops, people turn to the railway station. Anxious to get home, they would not mind paying a higher fare than that by road, but the difference of the road and rail single fares is so great that they are confirmed in their belief that rail travel is only to be resorted to when there is no alternative.

It is difficult to fathom the mentality which lies behind this policy of high single fares and its corollary—nearly every return fare a reduced fare. There appears to be an idea that single fares are sacred and that any change can be made only by fiddling with reduced fares. It would be interesting to know why the present monthly returns are based on single fare-and-a-third and what mathematical formula demonstrated that a return journey will only bear a charge one third as heavy as the forward journey.

Then there was the old railway companies' attempt to reduce their liabilities as much as possible, which led them to issue masses of cheap tickets subject to the condition, "Neither the holder nor any other person shall have any right of action against the company in respect of any injury (fatal or otherwise), loss, damage or delay, however caused . . ." This distinction between ordinary and cheap tickets has now been dropped. Again by issuing cheap tickets at single fare or less the company had a cast-iron excuse if faced with any request for refund on an unused return half of such a ticket—the holder had not paid more than the single fare for the journey made so nothing could be allowed. This defence will disappear if, as proposed, day returns are increased but single fares are not.

Besides this there was the companies' obligation to carry members of the forces at half the standard fares. By

carrying the bulk of their passengers at reduced rates the companies largely evaded this in practice, though not in law, as there was no halving of the cheap fares. Surely there is no reason why the service rate should not be altered to two-thirds or three-quarters of the single fare if this is reduced as suggested above.

Another piece of this reduced return fare mania which should be sorted out is the practice of issuing dog, bicycle, and perambulator tickets at return for single fare, but with reduced liability. If there are to be two standards of liability (Executive's or owner's) surely there should be two sets of charges and not one scale, but with all singles at Executive's risk and all returns at owner's risk.

The British Transport Commission made a commendable start by cutting out workmen's tickets with their obsolete humbug about "artisans, mechanics or labourers" and replacing them with early morning tickets available to all at fixed hours and bearing normal liability.

Until all this jungle has been cleared, it is fatuous to talk of a new charges scheme, when all we are faced with is a patched-up version of the old one.

Yours faithfully,

A. J. CHENERY

29, Orchard Road, Beaconsfield

British Railways Publicity

September 4

SIR,—How easy and what a temptation it is to imagine that when we speak of our own personal tastes and opinions we are voicing those of the general public! Mr. Colquhoun has fallen into this common error in his letter in your August 31 issue when he berates railway publicity, quite forgetting or ignoring the fact that railway publicity has to reach all sorts of people, in fact, the general public. No other business has to cater for such varied tastes, and if some people are offended, many no doubt are attracted and even interested in what British Railways have to say in their publicity.

It seems the fashion now to be critical of everything that the railways do, and it seems, too, that many people take their cue from certain sections of the press. I am not saying that Mr. Colquhoun has been so influenced, but his letter has all the usual earmarks. May I point out to him that railway publicity covers a very vast field of which "Biff" and "Buff"—rest their souls—were a small fraction. What about the pictorial posters designed to reveal the full glories of our countryside, and their value in tempting people to visit these places? It might interest Mr. Colquhoun to know that hundreds of these posters are sold to the public every year; foreign visitors have given them high praise, and taken them home in hundreds.

Again, much railway publicity is of a purely annunciatory character and "Biff" and "Buff" were an attempt to take the stiffness and formality out of otherwise bald announcements—which is not easy. Incidentally Mr. Therm, now the backbone of gas publicity, was an object of considerable derision in his youth, but now that he is matured he is not only accepted but lauded as a symbol of effective publicity.

Has Mr. Colquhoun seen any of the Regional area folders, or the many booklets produced by the Regional publicity departments? Has he seen some of the recent posters publicising cheap trips, excursions and other festival facilities also produced by the Regions? Finally, would he tell me how he would set about putting "dignity" into railway advertising without making it stiff, formal, and uninteresting. Surely it is better to laugh at than to ignore or be indifferent to publicity, which, after all, is designed primarily to attract public attention. This is most difficult when everyday the public is being inoculated by the "bacillus indifferens," mostly from shots of the fancy and frilly advertising of underwear, soap-flakes, and toothpaste. Surely railway publicity gets away from that.

Yours faithfully,

DAVID VINE

112, Argyle Road, W.13

THE SCRAP HEAP

Light Articles Only

John Michael had just unearthed the outer cover of a ticket to and from the Hook of Holland. This journey he had made three years ago when he was six. On the cover of the ticket was the statement: "66 lb. (44 lb. child) Free Baggage." After studying this he inquired: "Did I only weigh 44 lb.?"—From *"The Manchester Guardian."*

Private Carriages by Rail

A correspondent recollects being taken by his father from Brighton to London, about 1879, to buy a brougham. This train, the 8.45 a.m., was allowed 70 min. to London Bridge. The brougham was taken to Brighton by the train in which father and son returned and the stationmaster at Victoria allowed them to travel in the brougham. This must have been one of the last cases of passengers travelling in their own carriages on flat trucks.

Customs Retort Courteous

An Irishman who had just returned from the Continent tells how a fellow countryman with whom he was standing at the Customs barrier in Dover found himself in the hands of a young and officious officer who might have been on duty for the first time. He seemed at any rate determined to do a thorough job.

With infinite care, this young official pawed his way through dirty linen, pausing from time to time to fire questions, with something of the lofty air of a barrister examining a hostile witness. Eventually, his search bore fruit, because in the toe of a worn sock he found a lipstick, which the traveller was bringing home for his sister.

With deep satisfaction the official shook it out. "And tell me," he said

—loud enough to impress other officials beside him—"do you normally carry lipstick in your hose?"

The Irishman smiled indulgently and said: "I'll be perfectly truthful with you. I don't normally carry lipstick at all."—From *"The Irish Times."*

Railway Meals

The question of food when travelling cropped up early in railway history; Dickens satirised the provision in his day as compared with that to be found in France. . . . A pamphlet of "Advice to Passengers" in the 'sixties makes no mention of anything like luncheon baskets, and if the traveller had not taken the precaution to provide himself with sandwiches and "a little cold wine or brandy and water" he could only hope to be favourably placed at the counter of those refreshment rooms which catered for the hungry passenger. In the refreshment room the passenger was advised to ask for what he wanted "in a loud clear voice" dispensing "with all courteous flummeries." Apparently such words as "Please" or "Thank you" wasted valuable time.—From *"The Manchester Guardian."*

Something Out of the Ordinary

Not many go by rail from Wool, Dorset, to Sway, Hampshire, fare 6s. 2d. return, and so when somebody asks for a ticket the booking clerk at Wool has to write in Sway in ink. Three soldiers from Bovington camp noticed this, thought how easy it would be to put in the name of another station much further away, and as a result they appeared at Wareham accused of "something out of the ordinary in ticket frauds."

The Wool booking clerk became suspicious in June, when he found a ticket

made out to Bury, Lancashire, but the writing was not his. A watch was kept, and one of the soldiers, who had bought a ticket to Sway, was found on the train with a ticket to Widnes, which should have cost him 48s. 5d., but had cost him much less.

These "cheap" tickets proved dear. One soldier was fined £6 and his comrades a total of £7 10s., while each was ordered to pay £3 7s. costs.—From the *"Daily Express."*

Crossing the Border

All previous illegal border crossings were surpassed when a train carrying 106 passengers was driven into Western Germany with the consent and delighted approval of 25 of the passengers and to the consternation of the others. The train was on a run from Prague to Asch, almost at the meeting point of Czechoslovakia, Eastern Germany, and Western Germany, and consisted of three coaches and a goods wagon. Before it reached Asch it seems to have been diverted along a disused track leading to the border.

The engine driver was apparently not in the plot, and the brakes of the train had been interfered with so that he could not at once bring it to a halt. When it did stop, another driver appeared on the side of the line, and took over control. At the same time a barricade was removed by the fireman and guard and the train was driven over the border before the passengers not in the conspiracy realised what was happening. It arrived unannounced at Selb inside the American Zone.—From *"The Times."*

Chords and Kippers

(See *"Breakfast Xylophones"* in the *Scrap Heap* of July 20)

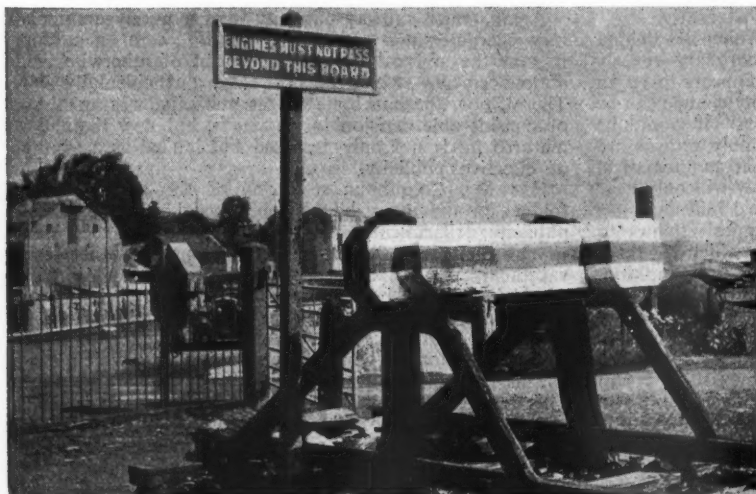
I sleep, I dream, I wake,
Unless I much mistake
We must be half-way over—
I don't remember Dover—
What was that lovely tune
I dreamt? Not "Claire de lune"
Nor the discordant chime
Ascribed to Harry Lime,
It was not "Madelon"
Nor was it "Sur le Pont."

Ah! There it is again
Resounding through the train,
Listen—"Arise and Shine!"
My stars—it's nearly nine!
At least, it's after eight,
I must accelerate;
Shall I have time to shave
Or had I better save
Five minutes for a kipper?
Where is that blinkin' slipper?

Since when have xylophones,
With all their dulcet tones,
Served as effective rousers
Of self-respecting "drowzers"?
Why not do as before,
Or bang the bally door?

A. B.

Farthest West from Waterloo



Buffers at Padstow, now Western Region but formerly the westernmost terminus of the Southern Railway

Photo]

[J. H. Aston

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

VICTORIA

Melbourne Underground Project

The plan for an underground line from Richmond to North Melbourne, referred to in our April 27 issue, is unlikely to be realised for some time. Mr. R. G. Wishart, Chairman of the Railways Commissioners, has stated that the project, which is supported by Melbourne City Council, is secondary to other works to meet traffic and defence needs.

EGYPT

Train Control Trial

The main Cairo-Alexandria line is being equipped experimentally between Calub and Benha with the Kofler train control system.

SOUTH AFRICA

Operating Results

The operating results for the railways and auxiliary services showed a surplus for May, 1951, amounting to £1,052,113. The favourable results were due mainly to improved revenue from railway and harbour services. For the first two months of the current financial year (April and May, 1951), the services have now an accumulated surplus of £2,212,130. To this surplus the railways have contributed £1,958,553 and the harbours £445,426.

SWEDEN

Export of Iron Ore

The export of iron ore has been on the increase for a number of years. It totalled 12,900,000 tonnes (valued at Swedish kr. 405,000,000) in 1950, compared with 12,800,000 tonnes in 1949 and 11,500,000 tonnes in 1948. During the first half of this year, 6,040,000 tonnes were exported; it is expected that

the total for 1951 will reach 14,000,000-14,800,000 tonnes.

Almost the whole of the ore for export originates from Kiruna on the Lapland line, and is exported via the Norwegian port of Narvik which is free from ice the whole year. Kiruna is 80 miles from the Norwegian frontier; the frontier station is Vassijaure, 3½ miles inside Swedish territory. The Norwegian section is from Vassijaure to Narvik, 28½ miles. The whole line is electrified.

The capacity of the Kiruna-Narvik section amounts to 11,000,000 tonnes a year. Any increase would require longer trains and more powerful locomotives. A first credit of Swedish kr. 22,500,000 towards the building of heavy locomotives for the iron ore trains was granted recently by the Riksdag; further credits totalling Sw. kr. 51,500,000 for the same purpose are to follow.

NORWAY

Main-Line Electrification

Electric traction was inaugurated between Lillestrom and Charlottenberg (72 miles) on June 14, when a special train ran from Oslo to Charlottenberg and back, conveying members of the Government and officials of the Norwegian and Swedish State Railways.

The work began in June, 1948, and has cost kr. 25,000,000 (about £1,250,000). About 640 miles, or 23 per cent., of the State Railways are now electrified, carrying about 48 per cent., measured in tonne-km. of the total traffic. About one hour is saved on the Norwegian section of the Oslo-Stockholm service, which is now electrically worked throughout.

The timetable which comes into force on October 1 shows two through trains daily between the two capitals; the first, at 7.30 a.m. from Oslo, will reach Stock-

holm at 7.52 p.m. (6.35 p.m. on Saturday and Sunday), and the second, at 10.5 p.m. from Oslo, will reach Stockholm at 7.45 a.m.

BELGIUM

New Maritime Station at Zeebrugge

At a ceremony attended by many prominent persons, a new maritime station at Zeebrugge was opened on August 19, following the complete restoration of the port which was heavily damaged during the war. The station, which will handle both goods and passenger traffic, is 500 ft. long and 50 ft. wide with two tracks. The inauguration of the station coincided with the fiftieth anniversary of the port.

FRANCE

Closing of Line Opposed

The Colmar Chamber of Commerce has begun a public inquiry into the closing of the railway from Colmar to Neuf-Brisach near the German frontier required by the Ministry of Public Works. The main argument in favour of the closing is that the traffic was insufficient before the war, but it is pointed out in reply that it was because of the autarchy in Germany under the Hitler régime.

The present outlook for trade between Central Alsace and Germany supports the view that the closing of the line is not desirable, particularly as there is a proposal for a direct line from the Paris direction to Colmar through a tunnel in the Vosges near Sainte-Marie-les-Mines. The Colmar-Brisach section would be an extension of the line from Paris to Eastern Europe and the Balkans. Economically, the line would be of great value to the whole industrial area around Colmar, for which Neuf-Brisach is the only outlet



Inauguration of Oslo-Charlottenberg electrification showing: (left) special train at Oslo East; (right) Kongsvinger Station beflagged for the occasion

for this industrial area towards Western Germany. To divert traffic towards Kehl and Chalampé would hamper increasing trade with Germany.

New 50-cycle Locomotive on Test

In recent weeks a second 50-cycle locomotive has been undergoing trials on the S.N.C.F. line from Aix-les-Bains to La Roche-sur-Foron. This design employs two air-cooled pumpless steel tank rectifiers for supplying the traction motors. The method of control consists of varying the voltage on the rectifier anodes by connecting a tapped secondary on the main transformer so as to assist or oppose the voltage across a fixed winding.

A notable feature of the new locomotive is the fact that it was developed and built for the S.N.C.F. by Alsthom in less than a year. Mechanical parts and traction motors of two existing Bo-Bo classes have been used. The motors are nose-suspended in two articulated four-wheel bogies. Weigh-

ing approximately 80 tons, the locomotive has a continuous rating of 2,660 h.p. at 37 m.p.h., corresponding to a tractive effort of some 26,500 lb. In building this locomotive the aim was to provide as soon as possible a means of testing the rectifier apparatus on the track. No provision has been made for additional apparatus to permit running on 1,500 V. d.c., as this would have entailed departing from existing mechanical designs.

AUSTRIA

Reconstruction of the Tauern Tunnel

The Tauern Tunnel which carries the double-track Salzburg-Villach main line through the Tauern range, penetrates, for about 1,000 ft. the alluvial deposits of a mountain stream. During construction in 1901, progress on this section hardly exceeded 3 ft. daily. On one occasion, the water caused great damage to structures and installations.

On the same section, the masonry

showed early signs of defects which, in spite of recurring repairs, became more and more pronounced and finally began to endanger the safety of operations. Large quantities of water passed through joints and fissures, destroying the mortar joints of the granite masonry and carrying material along so that the uneven earth pressure caused considerable deformations of the vault. At one point, the crown sagged 15 in. To maintain the service during the winter, a special ice removal service had to be organised. Even the drainage duct in the tunnel sole was found to be affected by the excessive influx of water, thus endangering the stability of the tunnel.

Major repair works were carried out in 1948-49 on a section about 230 ft. long. To maintain, at least, single-line traffic, the work was divided into two stages. During the first year, work was confined to the right-hand abutment, whilst the vault was shored. This was followed by the reconstruction of the left-hand abutment and vault.

Publications Received

I Drove the Cheltenham Flyer. By Driver J. W. Street. London: Nicholson & Watson, 26, Manchester Square, W.1. 7½ in. x 5 in. 154 pp. Illustrated. Price 8s. 6d.—Apart from its historical and technical appeal, this account of a famous top-link driver's career with the Great Western Railway should commend itself to a wide public as a most readable and human document. Driver Street has set out his experiences as cleaner, fireman and driver between 1891, when he joined the G.W.R. at Westbourne Park Shed, and his retirement from the railway service in 1936. Personal reminiscence naturally occupies the greater part of the book and the author does not fail to give outspoken comment on the various controversial matters met with in his career. As well as a number of photographic reproductions, there is a large number of illustrations by Mr. R. Barnard Way.

Locomotive and Train Working in the Latter Part of the Nineteenth Century. By E. L. Ahrons. Vol. 1. Cambridge: W. Heffer & Sons Ltd. 9 in. x 6 in. 152 pp. + 24 pp. plates. Price 15s.—Combining a sound technical knowledge with enthusiasm, diligence in research, and keen observation, the writings of the late E. L. Ahrons on locomotives have come to rank among the classics of railway literature. Between January, 1915, and November, 1926, in a long series of articles in *The Railway Magazine* on "Locomotive and Train Working in the Latter Part of the Nineteenth Century," Ahrons covered every railway of importance in the British Isles. The issues in which the articles appeared have long since been out of print, and to provide a more permanent record of an important and colourful period in the development of the steam locomotive the series is being

reprinted in book form. The articles are being grouped, as far as is convenient, under the old 1923 companies, with separate volumes for the Scottish and Irish railways, making a total of six. The first volume, which has now been published, covers the Great Northern, North Eastern, Great Eastern, Midland & Great Northern Joint, Hull & Barnsley, and Manchester, Sheffield & Lincolnshire Railways. Very little of Ahrons' original text has been altered; references to the "present day" have been left as they were written. As Mr. Charles E. Lee says in the foreword, the volumes will be a welcome tribute to the memory of an outstanding writer of a previous generation.

Notes on East African Timbers.—An enlarged edition of Timber Information Leaflet No. 28 dealing with East African timbers has been issued. This includes some 15 new species and contains an index of common and botanical names. The leaflet has been brought up to date so that users can find any timber as listed under titles which are synonymous. Copies can be obtained from the Timber Development Association, 21, College Hill, London, E.C.4.

Cornish Engineers. By Bernard Hollowood. Illustrated by Terence Cuneo. Camborne: Holman Brothers, Ltd. For private circulation. 10 in. x 8 in. 96 pp. No price stated.—This well-produced and beautifully illustrated volume has been published to celebrate the 150th anniversary of the founding of Holman Brothers Limited, at Camborne, Cornwall, in 1801, initially to manufacture boilers for the Cornish mining industry. Nicholas Holman, the founder, worked with and for many famous engineers, including Richard Trevithick, who in 1815 ordered from him two of the first high-pressure boilers to be made for his "high pressure steam engine," patented in that

year. Five generations of Holmans have carried on the business until today. It now specialises in compressed air plant and tools, and 80 per cent. of its output goes abroad. The author, Bernard Hollowood, a well-known industrial writer and economist, tells the story of this unusual undertaking with historical accuracy and imaginative insight. The colour plates are from paintings by Terence Cuneo.

Morganite Commutator Brushes.—The essentials for satisfactory brush operation on commutators are dealt with in an illustrated booklet (ZD 18) issued by the Morgan Crucible Co. Ltd. The various faults analysed include burning of commutators, chattering, burning and corrosion of flexibles, sparking, armature faults, and so on. Also included are diagrams illustrating correct axial staggering and the method of mica recessing.

Conference on Heat Insulation.—The proceedings of the Conference of Heat Insulation, held under the auspices of the Joint Committee on Materials & Their Testing in conjunction with the Institution of Gas Engineers, at the Institution of Mechanical Engineers, London, in November, 1950, have now been published. They embody the text of the following four papers presented at the conference, together with discussions of them: "Heat Insulation in the Refrigeration Industry", by S. Richards; "The Economics of Thermal Insulation in Building Construction", by C. W. Glover; "High-Temperature Insulating Materials, their Properties and Testing", by J. F. Clements; and "Medium-Temperature Insulation", by E. G. Cawte. The proceedings can be obtained from the Secretary of the Institution of Gas Engineers, 17, Grosvenor Crescent, London, S.W.1, at 13s. 6d. a copy, post free.

New Power Signalling at York—2

Further details of the installation, with a reference to operating procedure and a description of some of the equipment

THE ground shunting signals at York show red and white for the "on" aspect, and form the only breakaway from the principles used earlier in the North Eastern Region, where the running signals are not preceded by shunting signals, the "on" aspect in earlier installations being given by two white lights. The use of a red light in the "on" aspect, which is a Railway Executive standard, has made it necessary for all shunting signals in a route to be cleared before the main signal.

Operating Procedure

Taking, first, route 6 (1) which has no such preceding signal; (a route number consists of the signal number followed by a number to indicate the actual route. The routes are numbered from top to bottom of the panel, the topmost route having the number (1)). The operation of the route switch will energise the 6 (1) reverse lock relay provided that all conflicting route relays are normal. The reverse lock relay sets the points in the route normal or reverse, as required (all points are non-restored and remain as last set) if all track circuit and other controls are clear. After the points have moved, the signal control relay circuit is made up, proving the track circuits in the route and fouling track circuits clear, in addition to detecting the points normal or reverse, as necessary.

The signal for route 6 (1), besides giving a yellow aspect (owing to diversion through the points to the up Leeds line the signal only clears to yellow with the approach tracks occupied) displays an illuminated junction indicator to the right. Where there is no diversion the clear aspect of a running signal (yellow, double yellow, or green) is dependent on the aspect of the signal ahead. At this location the actual time taken from turning the route switch until the signal indication changes is $4\frac{1}{2}$ sec., the electric point machines requiring 4 sec. to reverse the points, but a route with a comparable number of electro-pneumatic points will clear in just over two seconds from the turning of the switch.

The introduction of preceding shunting signals has necessitated a new operational procedure when these have to be cleared for a main signal route. The running signal route in this case is set up in stages, once the appropriate red switch has been turned. The route sets up to a shunting signal, but will not set up beyond it until the previous signal clears. Only when all shunting signals and track circuits incorporated in the route are cleared will the main signal clear. A shunting signal only requires fouling track circuits clear.

The time taken to set a route is, therefore, necessarily longer with these preceding signals, but the number of cases involving three or more is small.

Route 32 (15), down Leeds main to up main, is one of the more involved routes reading right across the intricate layout at the south end of the station to a point nearly at the north end of platforms 8 and 9. There are five shunting signals to set, and the route sets and detects 21 pairs of points, proves the same number of track circuits clear, and proves and locks normal no fewer than 130 other routes. The time taken to set this route up and clear the main signal is only nine seconds.

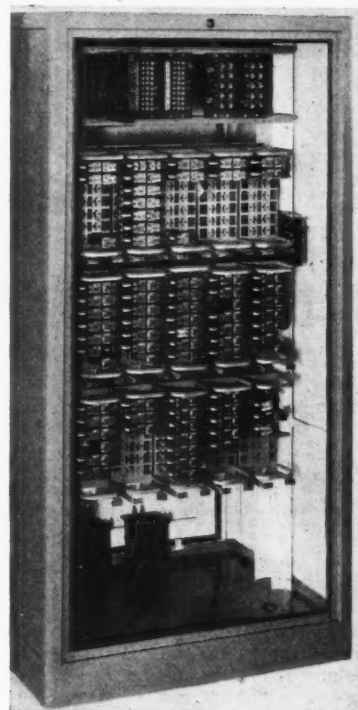
Approach locking extending back to the next running signal is provided on all colour-light signals, but only the first track circuit approaching a shunting signal is used for this purpose, owing to the low speed of shunting movements. Automatic time delay releasing is provided. Once a running signal has been passed, its lock relay may be placed "normal," provided the route switch has been restored, but each preceding shunt signal is held "off" until the train has passed it, the route thus being restored in stages as the train proceeds. This gives the quickest possible release to conflicting routes.

Train Describers

A very comprehensive train describer installation is provided, linked to the six adjacent signalboxes. A new departure for this country has been made in the form of display. Instead of merely indicating the order in which the trains are approaching, this has been so arranged that the information giving the class and destination of the train is illuminated in a panel, indicating the actual signal which the particular train is approaching, the indication moving forward in step with its movements. Once the code giving the description, destination, and direction has been set up on the appropriate line by the signalman, the apparatus works automatically, being controlled by the signals and the passage of the train over certain track circuits.

Initially the display at both the transmitting and receiving ends is shown as a flashing indication, and a buzzer sounds in addition at the receiving station. The buzzer is stopped and both displays are steadied on the depression of an "acknowledge" key by the signalman at the box towards which the train is proceeding. Provision is made for manual operation when any portion of the controlling signalling apparatus is out of order.

The advantages of this arrangement are particularly noticeable at the south end of the station, where there are six berths on the down line to Copmanthorpe and five on the up. On the apparatus full provision is made for movement of trains starting or terminating at the various yards in this area.



Typical train describer apparatus cubicle

Southbound trains are not described forward to Copmanthorpe or Naburn boxes until the train reaches Chalonsers Whin Junction, when the description is automatically sent forward to the box ahead towards which the route has been selected. The apparatus between York signalbox and York Yard South box is a separate unit from that linked with Naburn and Copmanthorpe, but provision has been made for the automatic re-transmission of the descriptions of trains from these places signalled to proceed to York Yard South box, as they approach the station area.

Except in a few cases, where additional movements are catered for, transmitter and receiver units are linked by only two wires. Transmission of the train description and the codes to step the display forward is effected by a series of pulses, their polarity selecting the required display combination, on what is known as the Polaridex system of coding. The apparatus is operated at 50 volts d.c. by P.O. 3000 type telephone relays of which there are nearly as many as in the main signalling scheme.

Telephones

The aim has been to reduce telephoning to the minimum indispensably necessary. A comprehensive system has, however, been provided to meet

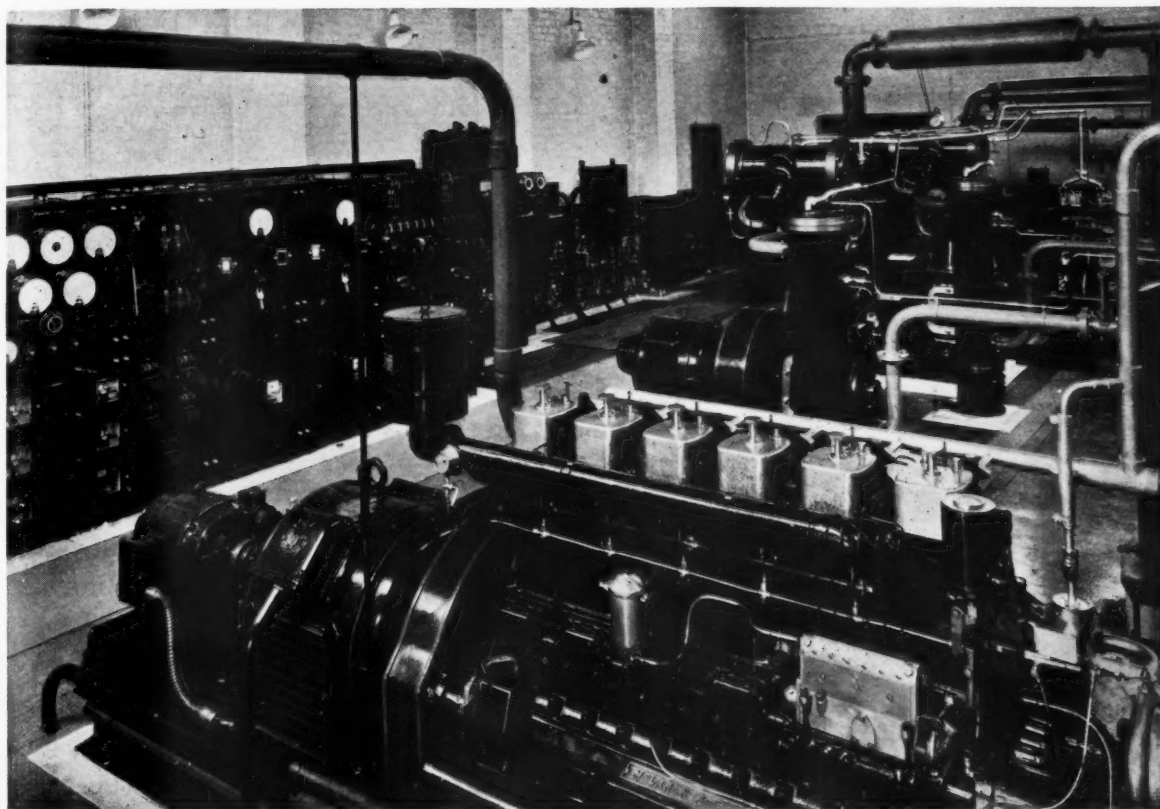
shunt and subsidiary signal lighting transformer is selected over a circuit closer remotely operated from the control console. The lower voltage is used at night to avoid "dazzle" to engine-men. In addition to the feeds to the fuse panels on the various relay racks, supplies are also taken from the 110-volt busbar to the 50-volt rectifiers for the theatre-type route indicators, 24-volt rectifiers for the general signalbox supply, 24-volt rectifiers for the point valves, and the 110/24/12-volt transformers for indication supplies. With the exception of the shunt signal lighting transformer all transformers and rectifiers are duplicated.

Open copper busbars, painted in dis-

busbar feeds are taken to the main 660-110 V. 35 kVA. transformers, the 660/110/55 shunt signal lighting transformer and the two ring mains, feeding north and south respectively through appropriate switch gear housed in the relay apparatus room.

The two supply feeders to the above mentioned switchgear may be paralleled and are brought from a main supply contactor and busbars on the power house control panel. An isolating knife switch is provided to direct the incoming B.E.A. feeder direct to the busbars, so isolating the control panel and contactor gear for maintenance purposes. The main contactor has been energised over a voltage relay

exciter is also directly coupled to the alternator and is provided with a belt-driven pilot exciter and an Isenthal voltage regulator. The set starts and runs without attention, and will stop should lubricating-oil pressure not build up within a given time from starting, or fail at any time after this short delay period; also if the engine speed or voltage do not come up to predetermined levels within a given time, to save the starter batteries. The "lockout" relay used to stop the set has "drop flags" indicating the cause of the shut down. No paralleling facilities are provided. Once the set has started, a return will not be made to the main supply until that has been restored



Power house with air compressors and standby plant

tinctive colours, over the top of the relay racks, feed the fuse panels on the ends of certain racks. As an additional protection against false operation the interlocking relays are grouped in small numbers and supplied from separate rectifiers. At no point are any of the services earthed.

Power Supplies

Power is received in the signalbox via two 660-volt single-phase feeders from the power house built close to the station, feeding a 660-volt busbar through oil-filled circuit breakers which are tripped by an over-current time-delay relay or reverse current relays in each feeder. From this

connected across the incoming feeder and set to trip the contactor if the voltage falls more than 6 per cent. and to initiate the starting of the standby set. A time delay of three seconds prevents false operation due to switching surges. The standby diesel engine is started up by two starter motors; when alternator voltage reaches 660 V. the standby contactor is energised and the set takes the load. Only eight seconds are required to start and run up to working voltage.

The set consists of a six-cylinder 1,000 r.p.m. McLaren diesel engine directly coupled to an 85 kVA. 660-volt single-phase Lancashire Dynamo-Crypto pedestal bearing type alternator. The main

and the set has been stopped manually. There are duplicate electrically-driven two-stage air compressors, each with a rated output of 200 cu. ft. of free air per minute, and driven by 40 b.h.p. 3-phase, 375 r.p.m. directly-coupled slip-ring motors. Operation is automatic and controlled by the reservoir air pressure. The main set starts up when the pressure falls to 55 lb. per sq. in. and stops when the pressure rises to 65 lb. Should it drop to 53 lb. the standby set also will be started.

A change-over switch provides that either compressor operates as required. There is an emergency set (to meet power failures) of similar design, rated at 100 cu. ft. per min., driven through

a centrifugal clutch by a 22-b.h.p. two-stroke 450 r.p.m. diesel engine. As there is sufficient reservoir capacity to maintain point operation until the shift line-men can be advised of a drop in pressure, arrangement is made for starting by hand from air bottles. The loading is controlled by a valve connected to the reservoir, making this set independent of the electrical supply. Any failure is indicated on the signalbox console.

Power is received at 660 V. single-phase over two feeders from a sub-station which also supplies the locomotive shed; duplicate 6,000/660-volt transformers are installed; the primary sides are connected through switchgear to a three-phase ring main from the Foss Islands Power Station of the

renewals, and the majority of the a.c. track circuits were installed and existing d.c. circuits converted where possible. Before the opening, point detection and track circuit relays in the new box were connected to operate in parallel with the temporary ones in the old boxes, and on opening these temporary connections were removed and the control circuit links installed. Everything had been thoroughly tested beforehand, leaving only correct sequence of aspects and point operation to be dealt with.

On April 8, 1951, Chaloners Whin and South Point signalboxes were dispensed with. On May 20-21 the large Locomotive Yard box (containing 295 levers in one row), and Platform, Water-

graph Engineer, North Eastern Area, L.N.E.R., and it has been completed and brought into use under Mr. J. H. Fraser, Signal & Telecommunications Engineer, North Eastern Region. It was designed to meet the requirements, first of the Superintendent of the Area, and later of the Divisional Operating Superintendent, North Eastern Region. It has cost over £500,000 and represents an outstanding achievement in British signal engineering.

Principal Contractors

The supply and installation of the whole signalling works were carried out by Westinghouse Brake & Signal Co. Ltd., the cable being obtained from the Craigpark Electric Cable Co. Ltd.,



"M3" electric point machine working switch diamonds at Chaloners Whin

British Electricity Authority which feeds, in addition, the railway carriage and wagon shops. A single 440 V. 3-phase supply is provided from the same source for the air compressor motors.

Cabling between the various locations and the north and south chambers is multi-core oil impregnated, paper insulated, lead sheathed, and armoured, and between the locations and the signals, point machines, and so on, rubber insulated and sheathed, with armouring. There are special cable chambers at the north and south ends of the station linked with cable shafts extending up to the mezzanine floor of the signalbox by ducts. All cables from the locations terminate in the two chambers, where similar signalling functions are grouped numerically into individual unarmoured cables to the signalbox, resulting in neat consecutive terminations on the mezzanine floor.

Power signalling would have been introduced at York in the early 1940's but for the war. Immediately after the war all points were changed to power operation, to avoid heavy mechanical

works, Leeman Road and Clifton boxes were closed, the working being transferred to the new signalbox in that order. The Locomotive Yard box was then demolished, and new connections laid over the site to platforms 15 and 16, brought into operation as through platforms on May 27.

Conclusion

The large signal gantries and brackets and the signalbox structure were designed and constructed by the Civil Engineer's Department, North Eastern Region. The Regional Signal & Telecommunications Engineer's Department constructed the junction indicators to its standard designs and also installed the temporary telephone system, which will be replaced in due course by one provided by Standard Telephones & Cables Limited, which supplied the train description apparatus. The main contractors for the signalling work were the Westinghouse Brake & Signal Co. Ltd.

The preparatory and initial work on the scheme was carried out under Mr. C. Carslake, when Signal & Tele-

communications Engineer, North Eastern Area, L.N.E.R., and it has been completed and brought into use under Mr. J. H. Fraser, Signal & Telecommunications Engineer, North Eastern Region. It was designed to meet the requirements, first of the Superintendent of the Area, and later of the Divisional Operating Superintendent, North Eastern Region. It has cost over £500,000 and represents an outstanding achievement in British signal engineering.

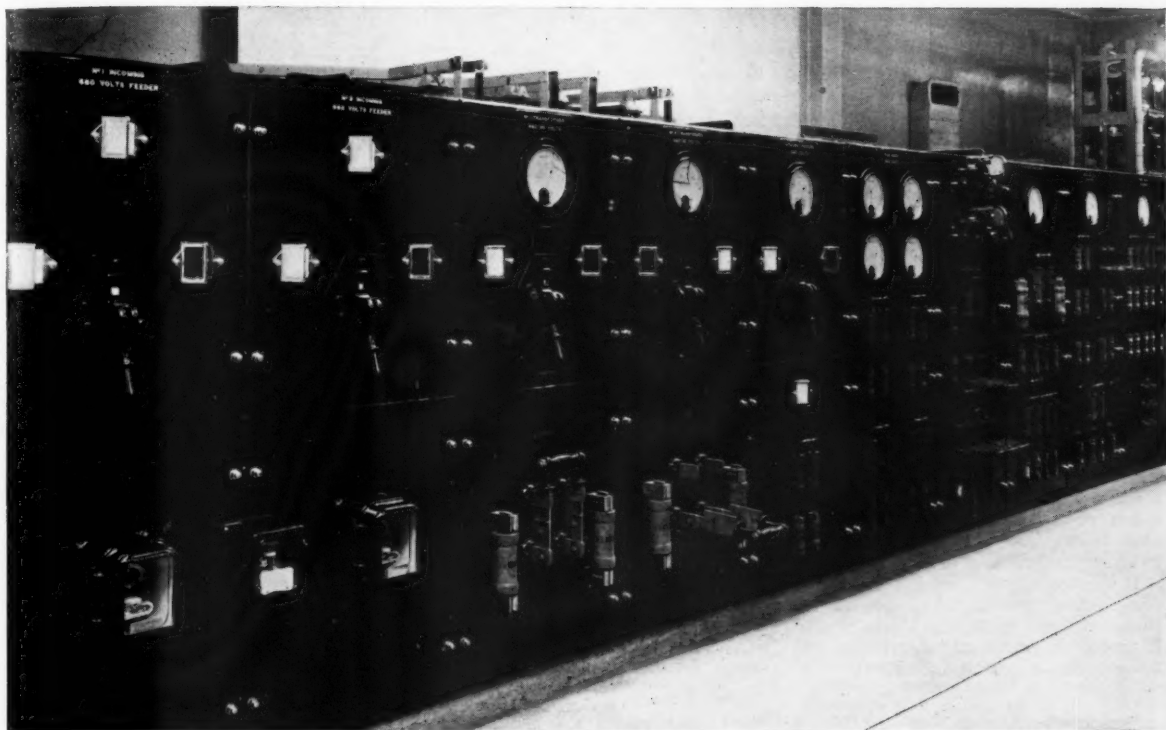
The diesel set and air compressors were obtained from J. & H. McLaren Limited and Alley & Maclellan Limited, respectively, and the switchgear and main transformers from the British Thomson-Houston Co. Ltd., Metropolitan-Vickers Electrical Co. Ltd., Contactor Switchgear Limited, Foster Transformers & Switchgear Limited, and Parmiter, Hope & Sugden Limited.

The train describer apparatus and telephones were supplied, the former also being installed by, Standard Telephones & Cables Limited.

(Concluded)

LEOPOLDINA TERMINAL COMPANY.—The Leopoldina Terminal Company, which is controlled by the Leopoldina Railway Company, announces the signing on September 6 in Rio de Janeiro of a provisional agreement for the sale to a Brazilian group of the company's holding of 147,769 shares of 200 cruzeiros each in the Cia. Cantareira e Viacao Fluminense at their par value. The aggregate purchase price is 29,553,800 cruzeiros (about £568,000).

New Power Signalling at York—2



Switchboard in relay room



Portion of relay room at York

Re-Equipment of Locomotive Stores at Darlington Works

Improved racking and binning to give greater accessibility to items and economy in storage space

THE locomotive works at Darlington is the largest main works in the Eastern and North Eastern Regions devoted entirely to locomotives. It employs 3,600 workpeople and has a capacity for 50-60 new engines, 110 boilers, and 600 general locomotive repairs annually. To meet the needs of this output, the value of stores held in stock at Darlington is £1,000,000; some 30,000 items are stocked and 10,000 issues are made every week.

The Stores Department at Darlington is divided into sub-stores established in various parts of the works adjacent to the points where the material is required for use. Most of the buildings are suitable for their purpose, but their equipment in the form of racks and bins dates back many years and shows little evidence of concerted planning; much of it is wasteful of floor space, and is so laid out that much unnecessary handling is involved.

It was recently decided that the Stores Department should take over certain responsibilities from the Mechanical & Electrical Engineer, namely, the custody of certain materials hitherto held as

working stocks in the shops, and the custody and issue of repairable and repaired material. These additional responsibilities made it necessary to make available additional storage accommodation. This has been accomplished not by building new accommodation but by making better use of existing accommodation by means of a new style of racking and binning. The new equipment was inspected on September 5 by General Sir Daril Watson, Member of the Railway Executive, as recorded in our last week's issue.

The new equipment is a development of that introduced in the Stores Department of the Scottish Region in recent years. The height of the racking is 6 ft. so that all stocks can be seen from floor level, and it tapers from 3 ft. 3 in. on the floor to 2 ft. 5 in. at the top. The pillar framing is made from scrap boiler tubing $1\frac{1}{2}$ in. dia. The tubular supports are boxed in with off-cut timber and the ends are covered with hardboard sheeting. The backs of the divisions consists of $\frac{3}{4}$ in. \times $\frac{3}{4}$ in. expanded metal panels, and are held in

position by timber fillets so that they can be detached to take long materials. The trays are made of scrap timber off-cuts and are supported by timber fillets. The bins are made of a size and depth to suit the material to be stored. The racking is bolted to the floor by means of a 2 in. \times $1\frac{1}{2}$ in. plate welded to the main tubular uprights. The racking is built in sections, and can be extended to any length required.

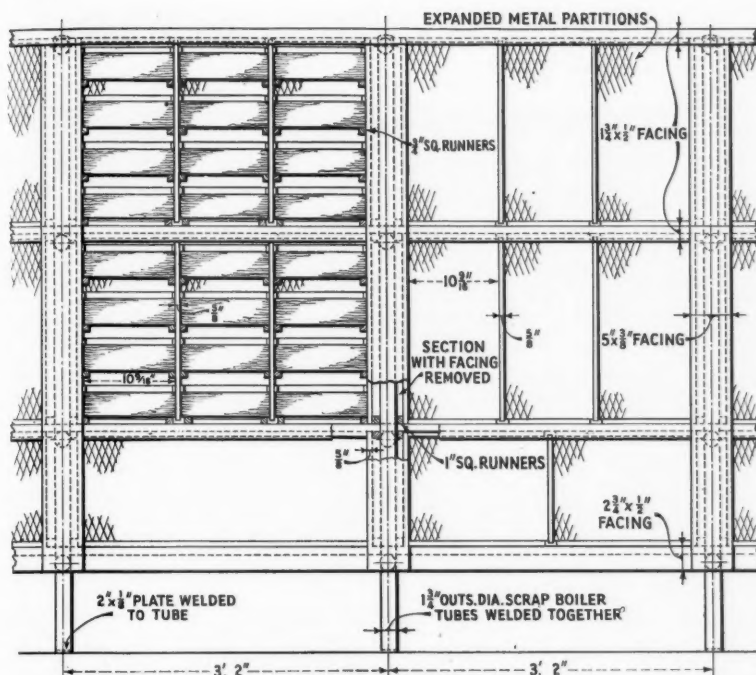
Timber facings $1\frac{1}{2}$ in. \times $\frac{1}{2}$ in. are provided to take the holder with the code number card; this card shows the stencilled code number and a brief description of the material. The minimum stock figure is shown in red on the top right-hand corner of the card. To save time and travel an indication board is fixed on the end of all racks in the main passage showing a brief classification of the materials stored in each length.

Economy in Floor Space

Stacking accommodation has been increased by one-third, and much greater accessibility of stores has been achieved. Practically all this equipment



Compound for outside stocks, showing chain-link fencing welded to scrap flue-tube supports, and orderly arrangement



Detail of construction of rack, with tubular supports made from scrap boiler tubing, boxed in with off-cut timber.

was made from second-hand material, the rack ends and intermediate supports from scrap boiler tubing, and the shelves and trays from old timber and wood offcuts. Bins are painted St. Andrews blue outside, and white inside.

Lights are fitted by means of conduit tubing 18 in. above the racks and centrally situated to light the bins on each side of the path. The lamps used are 60 W., and are fitted with plastic shades. Lights are controlled by independent switches at the end of each rack.

Charged-out Stocks

At one end of the erecting shop store, wall racks have been erected in the shop to hold charged-out stocks of small materials in frequent use, such as bolts and nuts, studs, rivets, and so on. Previously these items were part of stores stock, and were issued against individual requisitions, as required. The new system of charging out in bulk enables the workshops staff to be supplied more quickly, and discourages them from drawing quantities bigger than they need for immediate use. It also dispenses with a considerable volume of work in making out requisitions, recording issues, and in accountancy costing.

Adjoining the brass store, a recovered material store has been provided, where all brass mountings stripped from locomotives are examined and segregated between repairable and scrap. The scrap material is immediately disposed of and the repairable material is, as required, handed back to the works for repair against stores order. The repairer material is

then taken into stock and issued as required in preference to new material.

Not all stocks are held under cover. There are many items such as castings and forgings which are suitable for storing in the open. Hitherto these have been stored on convenient sites in different parts of the works. The policy has been adopted of providing compounds for all outside stocks. These compounds are floored with concrete or

second-hand sleepers, and fenced with chain-link fencing welded to scrap flue tube supports. The orderly arrangement of stocks in these compounds improves the general appearance of the works and facilitates stock control. The stocks all bear an identification label showing code number, brief description of material, and minimum stock figure.

At Darlington, a colour scheme has been introduced to provide easy identification of materials in the iron and steel castings compound, the various castings being marked with a yellow, green, or maroon cross, according to the building programme for which they are required.

The erection of the new equipment was carried out by the Mechanical & Electrical Engineer to the Stores Superintendent's requirements. It is estimated that the work will cost about £8,000. It will facilitate the work of the Stores Department; will enable an improved stores service to be given to the works; and will lead to economies to a total of about £2,000 a year.

ROAD & RAIL TRAFFIC ACT (EXEMPTION) REGULATIONS, 1951. The regulations granting exemption in certain cases from a requirement of the Road & Rail Traffic Act, 1933, that a goods vehicle shall not be used for the carriage of goods for hire or reward, or in connection with a trade or business, except under a carrier's licence, have now been consolidated. At the same time the Minister of Transport has extended the list of exemptions to cover other uses of vehicles which are technically goods vehicles and would otherwise require such licences. Exemptions are also granted for the use of pedestrian controlled vehicles for the carriage of tools, apparatus, or materials required by the driver in carrying on his work. Copies can be obtained from H.M. Stationery Office.



New racking, tapering for smaller items, with trays made from scrap timber offcuts; modified lighting illuminates all items in store

Re-Equipment of Locomotive Stores at Darlington Works

(See article on page 296)



Part of locomotive stores before re-equipment, with uneconomical use of floor space and items stacked over racks, necessitating staff climbing to obtain access



The same shop after re-equipment, with all items readily accessible, increased floor space, and improved lighting

RAILWAY NEWS SECTION

PERSONAL

Mr. T. A. Crowe has joined the board of the North British Locomotive Co. Ltd. as Chief Managing Director.

Mr. M. H. B. Gilmour, Chief Solicitor to the British Transport Commission, who, as recorded in our June 29 issue, has assumed the duties formerly performed by Mr. Miles Beevor as Legal Adviser to the

was appointed Parliamentary, Rating & General Assistant to the Solicitor, Great Western Railway Company, and he became Assistant Solicitor to the company in 1943, and was appointed Solicitor in 1945. He became Chief Solicitor to the British Transport Commission in 1949.

The Minister of Transport has accepted the resignation of Sir Alfred Faulkner, from the office of Licensing Authority for

Mr. L. Callaghan has been appointed General Agent, Rotterdam, Canadian Pacific Railway, in succession to Mr. T. Plomp, who has resigned.

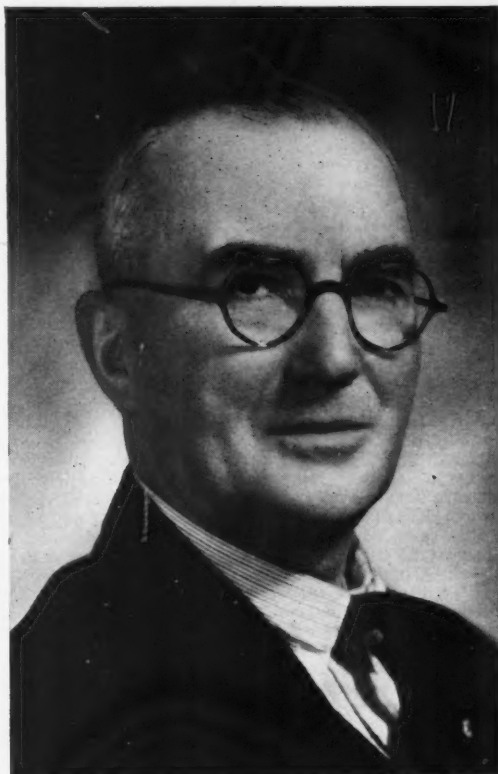
Mr. P. R. Hickman, O.B.E., Chief Officer (Stores), Railway Executive, who, as recorded in our July 27 issue, is retiring on January 31 next year, began his railway career in the Stores Department of the Midland Railway at Derby in 1905. He



[Photo]

Mr. M. H. B. Gilmour

Chief Solicitor to the British Transport Commission, who has assumed the duties of Legal Adviser



[Lafayette]

Mr. P. R. Hickman

Chief Officer (Stores), Railway Executive, who is retiring on January 31, next year

Commission, and now holds the title of Chief Solicitor & Legal Adviser, was educated at Leighton Park and abroad. In 1929 he was admitted a solicitor, and joined the staff of the late Mr. A. G. Hubbard, the Solicitor to the Great Western Railway, in the Parliamentary & General Department. Between 1931 and 1935 he represented the company on all parts of the system in numerous objections to applications for licences under the Road Traffic Act, 1930, and the Road & Rail Traffic Act, 1933. He assisted in the company's successful opposition to the Severn Bridge Bill in 1936 and was engaged in general and Parliamentary work from that year until 1940, when, in July, he joined the R.A.F.V.R. He served in the Ministry of Aircraft Production and undertook special investigations for the then Minister, Lord Beaverbrook, but was released from the R.A.F.V.R., with the rank of Squadron-Leader, at the request of the Minister of War Transport, in September, 1941. In that month Mr. Gilmour

the Eastern Traffic Area, and has appointed Mr. W. P. S. Ormond, an Assistant Secretary of the Ministry, to succeed him with effect from October 19.

Mr. F. J. J. Prior, District Engineer, Derby (South), London Midland Region, has been appointed District Engineer, Purley, Southern Region, with effect from September 24.

Mr. Thomas Anderson, Chief Assistant in charge of Litigation & Prosecutions in the British Transport Commission Legal Service for Scotland, is retiring on October 6.

Mr. J. P. O'Brien has been appointed a Director of the Irish Tourist Board, in succession to Mr. Noel Huggard.

Mr. W. H. Burton, Stationmaster, Newcastle, North Eastern Region, has been appointed Stationmaster, Liverpool Street, Eastern Region.

was transferred to Euston in 1926 as Assistant (Stores Inspection) to the Chief Stores Superintendent of the L.M.S.R. and four years later became General Assistant. Between 1943 and 1945 Mr. Hickman was Chief Superintendent of Sea Transport Stores, Ministry of War Transport, and in that capacity visited the U.S.A., Canada, India, Ceylon, South Africa, the Mediterranean area and North West Europe. He resumed his duties with the former L.M.S.R. in January, 1946, as General Assistant, and in May of that year was appointed Assistant Chief Stores Superintendent. He became Regional Stores Superintendent in March, 1948, and Chief Officer (Stores), Railway Executive, in January, 1950. Mr. Hickman was made an O.B.E. in the King's Birthday Honours, 1946.

Lt.-Colonel J. N. Peck, who retired as District Engineer, St. Pancras, London Midland Region, last year, has been elected a Member of Watford Rural Council.



Mr. D. A. Clarke

Appointed Transportation Superintendent,
New Zealand Government Railways



[Elliott]

Mr. L. C. Johnson

Appointed Archivist, British Transport
Commission

[& Fry]



Mr. John H. Scholes

Appointed Curator, British Transport
Commission

Mr. D. A. Clarke, M.B.E., District Traffic Manager, Wellington, New Zealand Government Railways, who, as recorded in our August 24 issue, has been appointed Transportation Superintendent, joined the Railways Department as a cadet at Christchurch in 1912, and was stationed successively at many railway offices throughout the South Island, before being appointed, in 1936, to the Transportation Superintendent's Office at Wellington. He was appointed Chief Transportation Inspector in 1947, and held the position of Assistant Transportation Superintendent from 1948 to 1950, when he was promoted to be District Traffic Manager, Wellington. In the 1914-18 war Mr. Clarke served overseas with the 1st N.Z.E.F. for a period of 3½ years, and during the second World war was three years in the Middle East with the New Zealand Railway Operating Group. He attained the rank of Major, and was awarded the M.B.E. For a few

months, Mr. Clarke was attached to Movement Control, General Headquarters, Middle East.

Mr. L. C. Johnson, who, as recorded in our June 29 issue, has been appointed Archivist, British Transport Commission, had formerly been Registrar of the L.M.S.R. Register of Stockholders, and is 53 years of age; he was educated at Watford and joined the former L.N.W.R. in 1911. He passed through various sections of the Transfer Office and rose to become Head of the Department dealing with the registration of Scottish Trustees for purposes of Conveyance under Scots Law. Mr. Johnson was made Chief Clerk in December, 1944, Assistant Registrar in 1946, and Registrar in 1949. In his new appointment he will be responsible for the preservation and custody of all historical records, including early railway and canal minute books, and all important docu-

ments and papers meriting retention, but not required for the current business of the Commission and its Executives; he will be attached to the Department of the Chief Secretary. Mr. Johnson will ensure that proper standards of security and control of records are adopted with due regard to the practices of the Public Record Office, and when his small organisation is established, it is intended to give facilities for inspecting the records to students and research workers.

Mr. John H. Scholes, who, as recorded in our June 29 issue, has been appointed Curator, British Transport Commission, had formerly been Curator of the Castle Museum, York. He was born in Lancashire in 1914 and educated at King William's College, Isle of Man. In 1936 he was appointed first Curator of the Corporation Museum, Southport, and was responsible for its inauguration, planning and display



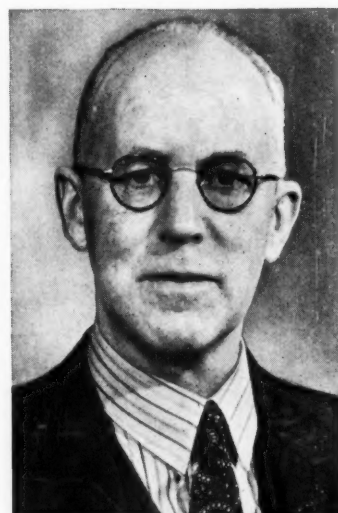
Mr. C. T. Bishop

Appointed Assistant Chief Mechanical Engineer,
New Zealand Government Railways



Mr. J. Hannah

Staff Superintendent, New Zealand Government
Railways, 1948-51



Mr. W. E. Worsfold

Appointed Staff Superintendent, New Zealand
Government Railways

of exhibits. He was appointed Curator of the Castle Museum, York, in 1947, and has been mainly responsible for establishing that museum's reputation as a folk museum; annual attendance of visitors increased by 112,000 to 220,000 between 1947 and 1950. In 1948 he was responsible for the construction of an eighteenth-century street in full scale depicting various trades and corresponding workshops, and he conducted the King and Queen and Princess Margaret around the Museum in 1948, and the Duchess of Kent in 1949. He is a fellow of the Royal Society of Arts and a member of various English historical and cultural societies. In his new appointment Mr. Scholes will be responsible for organising the custody and display of old prints, pictures, models, rolling stock, typographical specimens, and other relics illustrating the history of public transport by road, rail and inland waterways. One of his tasks will be the establishment of a London collection of relics, as recommended in the Committee's Report. Mr. Scholes will be attached to the Publicity Division in the Department of the Chief Public Relations & Publicity Officer.

Mr. C. T. Bishop, A.M.I.Mech.E., A.M.N.Z.I.E., District Mechanical Engineer, Dunedin, New Zealand Government Railways, who, as recorded in our August 24 issue, has been appointed Assistant Chief Mechanical Engineer, joined the Railways Department in 1925. He served as a mechanical engineering cadet at Addington Workshops, Christchurch, and was appointed District Mechanical Engineer, Dunedin, in 1944.

Mr. J. Hannah, Staff Superintendent, New Zealand Government Railways, who, as recorded in our August 24 issue, has retired, joined the Railways Department in 1911 as a cadet at Christchurch. In 1922 he was promoted to the District Traffic Manager's Office at Auckland, where he became Staff Clerk in 1928 and Train-Running Officer in 1937. The following year he was appointed Manager of Railways Road Services in the Auckland district, a position he held for five years before returning to the Traffic Branch at Wanganui, where he eventually became Assistant Transport Officer. Early in 1948 Mr. Hannah transferred to Head Office, Wellington, as Relieving & Inspecting District Traffic Manager, and within a few months was appointed Staff Superintendent. For a period of four months, while Mr. Aickin was overseas, Mr. Hannah acted as Assistant General Manager in place of Mr. E. H. Langford, who then acted as General Manager.

Mr. W. E. Worsfold, Stationmaster, Frankton Junction, New Zealand Government Railways, who, as recorded in our August 24 issue, has been appointed Staff Superintendent, joined the Railways Department in 1913 as a cadet at Christchurch. After filling, progressively, various positions in South Island traffic districts, he became Transport Officer at Christchurch. Mr. Worsfold was appointed in 1949 to the position of Stationmaster at Frankton Junction, the busiest railway junction in New Zealand.

Mr. David D. Walker has been elected President and Mr. H. S. Broom Vice-President of the British Engineers' Association for the year 1951-52. Mr. Walker is Joint Managing Director of Evershed & Vignoles Limited, Chairman & Managing Director of Thomas Walker & Son

Ltd., and a Director of J. B. Brooks & Co. Ltd.; he is also a Member of Council of the British Electrical & Allied Manufacturers' Association. Mr. Broom is Joint Managing Director of Broom & Wade Limited, a Director of B.E.N. Patents Limited, a Member of the Executive Committee of the Federation of Manufacturers of Contractors' Plant and a Member of Council of the Industrial Welfare Society.

British Railways, Eastern Region, has announced that Mr. P. Williamson, Yardmaster, Sheffield (Traffic), has been appointed Stationmaster, Sheffield Victoria.

Mr. Howard S. Cullman, Chairman of the Port of New York Authority, U.S.A., who has been on a visit to this country, left Southampton in the *Queen Elizabeth* on September 6. On arrival at Southampton by boat train from Waterloo Mr. Cullman was met by Mr. R. P. Biddle, Docks & Marine Manager, Southampton, and before embarking made a comprehensive inspection of the Ocean Terminal.

LONDON MIDLAND REGION STAFF CHANGES
The following staff changes are announced by the London Midland Region of British Railways:—

Mr. C. S. Longsdale, District Motive Power Superintendent, Bescot, to be District Motive Power Superintendent, Edge Hill.

Mr. G. C. Parslew, District Motive Power Superintendent, Llandudno Junction, to be District Motive Power Superintendent, Kentish Town.

Mr. J. W. L. Thorley, Assistant to District Operating Superintendent, Liverpool Lime Street, to be Assistant to District Operating Superintendent, Crewe.

Mr. Richard L. Porter has been appointed Personnel Director of the American Car & Foundry Company in succession to Mr. A. G. Whyte, Junior, who has resigned.

The Council of Industrial Design has appointed Mr. John C. Gray as a Press Officer, following the resignation of Mr. Ronald Amos. In his new capacity Mr. Gray will combine the duties previously performed by Mr. Amos and Mrs. D. C. M. Warner.

Mr. E. C. Bourne, District Motive Power Superintendent, Kentish Town, London Midland Region, who, as recorded in our August 3 issue, has been appointed District Motive Power Superintendent, Old Oak Common, Western Region, was educated at Castleton Hall School, Rochdale, and Bury Grammar School, and in 1918 served with the 18th Officer Cadet Battalion at Bath. After joining the Lancashire & Yorkshire Railway in March, 1919, as a premium apprentice, he gained experience at Horwich Works, and at Bank Hall and Aintree Motive Power Depots. In 1922 Mr. Bourne was appointed Running Shed Foreman at Normanton and the following year moved to Mirfield in a similar capacity. He became Assistant District Locomotive Superintendent at Toton in 1939 and in 1943 was appointed Assistant to the Divisional Superintendent of Operation, Manchester, L.M.S.R. His next appointment was in 1945, when he transferred to Salford as District Locomotive Superintendent. In 1947 Mr. Bourne was appointed District Locomotive Superintendent at Kentish Town, London, a post which was later redesignated District Motive Power Superintendent.

The Consolidated Pneumatic Tool Co. Ltd. has announced the appointment of Mr. C. L. Fisher as Manager of its British Sales Division.

We regret to record the death on September 5, at the age of 80, of Sir Holberry Mensforth, K.C.B., C.B.E., Chairman of the English Electric Co. Ltd. from 1930 to 1933, and a Director of that company until 1936. He was also a former Director of Dorman Long & Co. Ltd. and a Director of John Brown & Co. Ltd. between 1931-45. Before 1920 he had been associated with the British Westinghouse Co. Ltd. and after the first world war had been Director-General of Factories, War Office.

Mr. A. C. Edrich, A.M.I.C.E., Senior Assistant to the Permanent Way Engineer, London Transport Executive, who, as recorded in our August 24 issue, has been appointed Permanent Way Engineer (Railways) and will report to the Assistant Civil Engineer (Permanent Way), is 40, and entered the service of the Metropolitan District Railway in 1930 as an apprentice at Lillie Bridge. In 1934 he became an engineering cadet and rose by 1938 to Liaison Assistant for Engineering Works on the Bakerloo Line in connection with the 1935-40 New Works Programme. Mr. Edrich has been Senior Assistant to the Permanent Way Engineer since 1944.

Mr. J. R. Hawkes, Head of the Freight Development Section, Commercial Superintendent's Office, British Railways, North Eastern Region, who has been awarded the Institute of Transport Robert Bell Travelling Scholarship, left York on September 8, on a 12-week tour of Norway, Sweden, Denmark, Germany, Holland, Belgium, Luxembourg, France, Italy, Spain and Portugal. The scholarship, which was awarded for the first time this year, will again be available in 1956. The present award has been granted to Mr. Hawkes for the purpose of travelling abroad to study handling and design of road/rail containers, and possible ways of increasing the standard of comfort and convenience of passengers by rail.

Mr. H. W. Brooksbank, who, as recorded in our July 20 issue, has been appointed a Principal Executive Assistant, responsible for the fares, ticket ordering, and miscellaneous traffics sections of the Commercial Manager's Office, London Transport Executive, is 49, and entered the service of the Metropolitan Railway in 1919 as a traffic apprentice. In 1922 he was appointed to the Commercial Manager's Office and, after service in the fares and rates office, became statistical assistant to the Commercial Manager. In 1934, on transfer to the London Passenger Transport Board, Mr. Brooksbank entered the development office and until 1941 was concerned with traffic investigation. From 1941 to 1946 he was seconded to the Ministry of Aircraft Production as transport liaison officer in the Directorate of Labour and was responsible for ensuring the smooth running of transport arrangements for employees in the aircraft firms. Mr. Brooksbank returned to the development office in 1946, and in 1949 was placed in charge of the fares and railway ticket ordering sections of the Commercial Manager's Office; he was responsible to the Commercial Manager for the preparation and implementation of the London Passenger Charges Scheme, 1950. He is a Brunel medallist of the London School of Economics.

Ministry of Transport Accident Report

Greenford, Western Region, British Railways; December 20, 1950

Brigadier C. A. Langley, Inspecting Officer of Railways, Ministry of Transport, inquired into the accident which occurred on December 20, 1950, at Greenford when the 8.33 p.m. autocar from that station to Ealing, consisting of one coach propelled by a 0-6-0 tank engine travelling bunker first, left the bay platform with the starting signal at danger and demolished the stop block of a spur 360 yd. ahead, protecting a junction in advance. The coach came to rest at the bottom of a high embankment with the engine above. Assistance was readily forthcoming and the five injured passengers and the driver were conveyed to hospital; the driver was detained. It was a fine, clear night. The accompanying diagram shows the lines, signals, and so on, essential to an understanding of the case.

The London Transport lines have colour-light signals and the Western Region lines oil-lit semaphores. The bay line starting signal is obscured at night from the rear end of the covered platform by the horizontal arms of the first two lighting posts carrying the awning, and there is also a blank spot near the third post, where the arm of the first obscures the view from the driver's compartment. The general intensity of the fluorescent lighting and the bright colour-lights make the oil semaphore lamps appear dull by contrast and this is particularly noticeable in misty weather. The Western Region points and signals are worked from Greenford Station box, all mechanically except 8 and 30, which have signal machines. The electrical controls and other locking concerned are given on the diagram.

Evidence

The signalman said that at about 8.31 p.m. he began setting the route for the autocar. He had just pulled 37 crossover when he noticed track circuit ESA.49 become clear and ESA.49 occupied and realised that the car had started. Before he could complete

the lever movements he heard it run into the stops and sent "obstruction danger." The last train on the up loop had been the 8 p.m. autocar to Ealing, and on the down, the 7.50 p.m. from Ealing had arrived at 8.8 to form the 8.33 return service.

Two other trains passed to the Birmingham line and he had no movements on the loop for nearly a quarter of an hour before the accident. No. 8 signal repeater was working correctly, and before the train started he had seen it to be showing that signal to be at danger. He had been in the box ever since the new signalling was introduced in 1947 and had had no failures, except a few minor track circuit ones. There had never been a danger side failure.

The driver was unable to give evidence for three months. He said he brought the car in just after 8 p.m. and stayed on the engine for 5 to 10 minutes. He then went to the driver's seat in the passenger coach. He had no difficulty in seeing the red starting signal light. A ticket collector got into the car and began talking to him. He stood with his back to this man and kept looking to the front. After some minutes he saw the starting signal change to green and $\frac{1}{2}$ min. later the starting bell rang. He opened the regulator and when the car was moving, closed it and drifted down the gradient towards the loop. He estimated that he ran into the buffers at about 8 m.p.h. He had been driving the car ever since the service had been transferred to the new station in 1947 and in clear weather had never had difficulty in seeing the starting signal.

The guard had only been on the service for two days after learning the road. He was talking to a porter and then followed him into the car and gave the bell signal to start. He was certain that the starting signal was off when he was standing on the platform, but it was pointed out that it could not be seen from where he was. He

then said he saw it when he was at the door of the coach.

The fireman (on the propelling engine) declared he saw the signal "off" when it was three-fourths of the way down the platform. He was certain the light was green and he was not confused by any other signal.

Tests of the Equipment

Points 35 were found unlocked and normal and the train had passed without splitting their switches. A signal and telegraph sub-inspector tested the interlocking and track circuit controls of No. 8 signal and found them to be correct, while insulation tests on the various wires showed everything to be in order. The mechanical locking was tested in the presence of Brigadier Langley and the contacts on lever 8 short-circuited. The signal remained at danger however, until the appropriate track circuits were clear and relevant points and signals electrically detected in the correct positions. Two recent cases of irregular working of the signal were examined. One was due to the lineman having temporarily disconnected the battery without the signalman's permission and the other to an intermittent track failure caused by a defective insulated rail-joint.

Inspecting Officer's Conclusion

The material facts are clear, but there was a conflict of evidence regarding the starting signal. The signalman was sure that the route was only partially set when the train started and No. 8 signal repeater at "on" before the train left. The three members of the train crew all stated that the signal was cleared for them, but, unless there had been some inexplicable failure of the locking or controls, it must have been at danger when the car passed. There was no suggestion that it had been cleared and then thrown back in the driver's face, nor was there any need for the signalman to

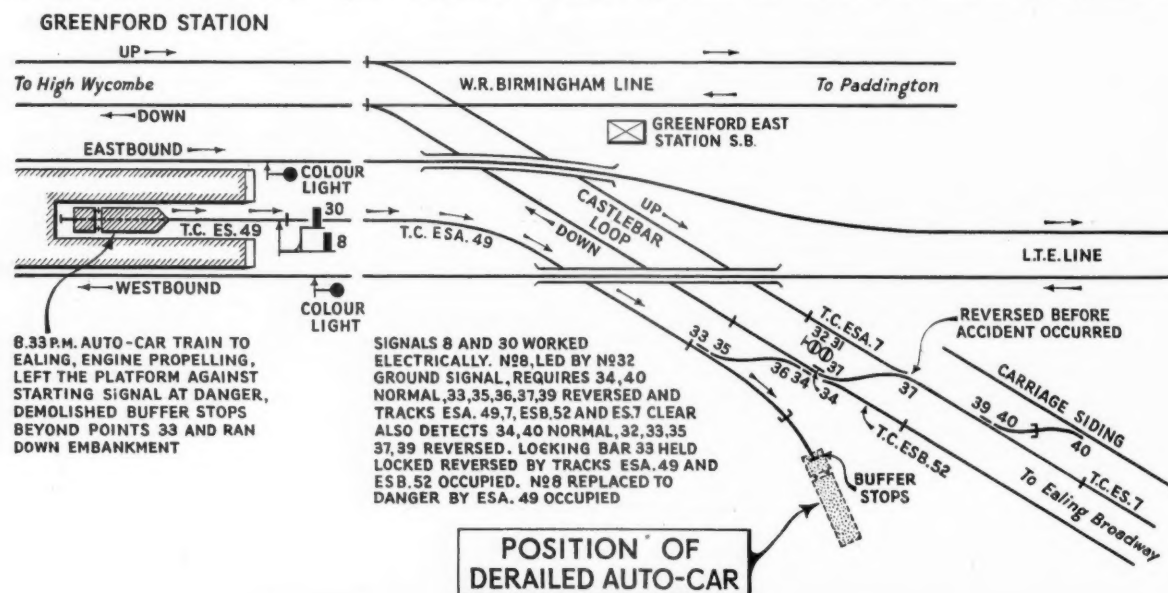


Diagram illustrating circumstances of accident at Greenford, Western Region, December 20, 1950

Extension of Train Buffet Services

Sir Harry Methven on the changing public demand: packed meals and tray service

take such action. Brigadier Langley is satisfied that the signalman was in no way responsible for the accident, and that the tests showed nothing wrong with the equipment; also that no stray currents could have actuated the signal to give a "false clear." Neither had the signal stuck in the clear position, because the driver was certain it was showing red some minutes before.

There was no lineman who could have interfered with the controls, and the only possible conclusion is that the autocar passed the starting signal at danger, for which the driver is responsible. Talking to the ticket collector may have distracted his attention, and on receiving the bell signal he automatically opened the regulator. He is 55 with a clear record of 37 years in railway service.

Brigadier Langley fears he had got so used to the routine that he took it as a matter of course that the signal would be clear for him. The fireman gave his evidence clearly, but must also have been mistaken. He could have had only a fleeting glance of the signal in any case before track ESA.49 would have replaced it, had it been clear, and he is not held responsible for failing to see it. He had other duties and there was no special reason why he should have been looking out for it.

The guard's evidence was of little value, as he could not see the signal from where he was on the platform, but his action in giving the right away cannot be criticised.

Remarks

This is another case of an engineman allowing his attention to be diverted and failing to observe the starting signal on leaving a station. Although its light was of low power compared with the colour-lights and platform lighting it could be clearly seen from the driver's compartment, and Brigadier Langley does not consider it calls for alteration, but the horizontal arms of the first two lighting poles might be turned parallel to the track so as to improve the view. All British signal systems are designed so that a failure will be on the safe side. Troubles of this kind do occur occasionally, to cause delay, but they do not endanger safety. Accidents from danger side failures have taken place, but so rarely, and under occurrences so unusual, that the risk may be regarded as very small.

RICHARD THOMAS & BALDWIN LIMITED.—Mr. E. H. Lever, Chairman of Richard Thomas & Baldwin Limited, in his statement circulated with the report and accounts of the company for the year, remarks that the balance of the trading accounts shows an increase of £1,288,882, including extraneous profits which increased by £420,565. The other main factors contributing to the good results were good outputs and good markets. Results constitute a record. Taxation, however, took a heavier toll in a year in which expenditure on development was also heavy. While the results were highly satisfactory the year was a very difficult one. Coincident with increased demand came acute shortages in raw materials. These shortages had persisted and the group in common with others in the industry had found it necessary to close certain works. Very good progress had been made with schemes of modernisation and some new operating units came into production during the year. Expenditure on capital account amounted to over £3,000,000. Considerable progress had been made in the development programme of the Steel Company of Wales Limited.

At a press conference held at the Great Western Royal Hotel, Paddington, on September 7, Sir Harry Methven, Chairman of the Hotels Executive, after announcing that as from the commencement of the winter train services on September 10, restaurant cars would be withdrawn from 78 trains on British Railways, outlined a scheme whereby buffet services would be substituted which would provide refreshments and snack meals for passengers at any time during the journey. Pullman car services are not included.

Sir Harry Methven, explaining the new proposals, said that the restaurant car problem was not an easy one at the present time, and, although economies were being made wherever possible, the loss on dining cars on British Railways last year was £600,000. Measures already taken would reduce the deficit in the current year and it was hoped that after a time this new scheme would enable the Executive to eliminate the deficit altogether.

Restaurant Cars when Justified

Their main purpose, however, was to meet a public demand, and there was ample evidence that on many services the majority of the passengers today did not want the full-course meal. Therefore, they had decided after full consultation with the Railway Executive and a thorough examination of the technical problems involved in the scheme, that an extension of the train buffet system could more readily meet the present-day needs of the travelling public. There was no suggestion, however, of taking off the dining cars on main-line express trains where there was still a sufficient demand for full meals. Meals on the buffet cars would be varied and of a reasonable price, and diners in these

cars who wished to spend more on their meals could do so.

Already a start had been made in the provision of special cars for the extended buffet services. They were, however, severely handicapped by the shortage of steel in this as in other respects, and in the meantime it was proposed to adapt existing restaurant car stock for the purpose. Should the buffet car service prove acceptable to the travelling public, then it would be extended as time went on to other trains.

Snacks Freshly Packed

Also, continued Sir Harry Methven, the growing demand for simpler and lower-priced meals would be met still further by extending the availability of freshly packed snacks at a number of stations *en route*, and where practicable on some of the trains as well. When a train was standing at a station, two or more trolleys as required, each with an attendant, would wait on the passengers and thus render unnecessary a hasty visit to the refreshment room. Packed meals in handy and attractive cartons, at prices ranging from 2s. to 3s. each, had proved increasingly popular since they were reintroduced after the war, and weekly sales of packed meals had so far risen to 28,000.

Plans had been prepared by the Hotels Executive for extending the packed meal service according to the demand and they were also trying to improve the corridor service for the benefit of invalids and elderly people unable to go to the refreshment car. They were also introducing the tray meal service for party travel, consisting of meals set out on plastic trays, complete with condiments and cutlery, provided in special returnable containers.



Lunching in the buffet car shown above are (right to left) Sir Harry Methven, Chairman, and Mrs. Ella Gasking, Member, Hotels Executive; Mr. John Elliot, Chairman, Railway Executive; Mr. J. H. Brebner, Chief Public Relations & Publicity Officer, British Transport Commission; Mr. David Blee, Member, Railway Executive; and Mr. F. A. Pope, Member, British Transport Commission

Staff & Labour Matters

Railway Wage Claim

At the resumed meeting which took place on September 10 between representatives of the Railway Executive and the trade unions, the union representatives intimated that the offer made by the Railway Executive on August 28, in response to the claim by the three railway unions, was not satisfactory. They indicated they would need to consult their own executives in the light of what had transpired at the discussions.

Railway Executive Offer

The proposals made by the Railway Executive provide: (a) increases in salaries and wages for the whole of the staff covered by the unions' claims (about 450,000); and (b)—for the first time on the railways—additional flat rate payments for full turns of duty booked to begin on Saturday afternoons.

The Executive proposals pay regard to the increase in cost of living which has taken place since the last wage increase in January of this year, and are particularly designed to assist in stemming the drift of key staff from the railway service to industries paying higher rates of pay, and to attract to the industry staff for those grades.

Under the offer, the minimum adult weekly rate of pay would have been raised from 102s. 6d. a week to 107s. a week, and the maximum increase in any one grade would have been 15s. a week, plus Saturday pay where earned.

The unions have expressed a desire that the matter be referred to the Railway Staff National Council, in accordance with the statutory procedure, and a meeting of the Council has been arranged for September 18.

Trades Union Congress

The President of the 83rd annual Trades Union Congress, which opened at Blackpool on September 3, Mr. A. Roberts, a textile workers' leader, in his presidential address suggested that applications for wage increases seemed unavoidable, having regard to the present cost of living; but if wages continued to chase prices there was danger of inflation.

Mr. Hugh Gaitskell, Chancellor of the Exchequer, urged moderation of wage claims, especially during the next few months. If, he stated, incomes rose proportionately more than production, prices would rise. The problem could not be solved, said Mr. Gaitskell, without the T.U.C. acting for industrial labour as a whole; the Government was at the disposal of the T.U.C. for further discussions of this most vital problem, a solution of which was essential if there was to be full employment without inflation.

Profits and Wages

Dealing with profits and wages, Mr. Gaitskell said the effect on wages and salaries of a transfer from profits was much less than was usually appreciated. If dividends paid to shareholders after tax in 1950 had been reduced savagely by a quarter, and the sums used to increase wages and salaries, the average addition would have been 3d. in the pound, or 1s. 6d. a week for a man earning £6. If it all went to wages and none of it to salaries the addition would be 4½d. in the pound.

Settlement of Industrial Disputes

The General Secretary of the N.U.R., Mr. J. B. Figgins, attacked the Industrial Disputes Order (1376) introduced by the

Government last month in substitution of Order 1305, and discussed in our August 10 issue. He contended that after the speech of the Chancellor of the Exchequer difficulty would be experienced in getting employers to concede just demands. The railwaymen's case would be prejudiced, and he was not convinced that the Railway Executive would voluntarily bring wages into line with those in other industries. His claim that the new order was a continuation of compulsory arbitration failed to win the support of the Congress.

The Congress authorised the General Council to put before the Government a five-point demand for action to be taken to check the rising cost of living: (a) Wider and more effective control of prices of home-produced goods and the reintroduction of other necessary controls; (b) restriction of the present limitation of subsidies; (c) investigation into the methods and costs of distribution; (d) more effective control of profits and strict limitation of bonus issues; and (e) removal of purchase tax from household necessities.

Compensation to Shareholders

A resolution relating to nationalisation and calling for reduced compensation was defeated. It claimed that compensation to former shareholders not only prejudiced just wage claims but was also reflected in higher charges to consumers. The wages of railwaymen were mentioned as a case in point. It was stated that while the Government must honour agreements made with the original shareholders of these industries, it should postpone discharge of the agreement in the same way as it had postponed the payment of post-war credits. Compensation could at least be reduced because of the economic situation and to enable workers to be properly paid and the public protected from increases in charges.

A T.S.S.A. representative opposed the motion, stating that the three railway trade unions were seeking a review of the financial structure of the B.T.C. They could not agree to break faith in respect of agreed compensation.

Mr. Lincoln Evans, on behalf of the General Council, asked the Congress to reject the resolution, as a request that agreements should be dishonoured could not be countenanced. Neither wages nor conditions of employment, he added, should be dependent upon the amount paid to previous owners of nationalised industries. Wages should be determined according to the amount workers needed for a reasonable life.

Another resolution which claimed that the success of the nationalised transport industry was menaced by the abnormal increase in the number of "C" licensed vehicles since the Transport Act came into force. Mr. H. W. Franklin, President of the N.U.R., stated that if transport was to be a success, the State industry must be a monopoly. The resolution was carried.

POWELL DUFFRYN LIMITED.—The directors of Powell Duffryn Limited announce that the consolidated net profit for the year ended March 31 is £604,934, as compared with £647,073 in the previous year, after crediting transfer from taxation reserves £72,452 against £66,248, depreciation £310,516 against £232,661, and taxation £1,041,460 as compared with £934,676. A final dividend is recommended on the ordinary stock of 5 per cent, actual, less income tax, in respect of the year ended March 31, making, with the interim dividend of 3 per cent, actual, 8 per cent. for the year.

Mechanical Engineering Research

The first meeting of the board of the Mechanical Engineering Research Organisation, Department of Scientific & Industrial Research, was held in May, 1947, when its objects were explained by Sir Edward Appleton, Secretary of the D.S.I.R., as reported in our issue of June 6, 1947. The first report which M.E.R.O. has issued on its work has been published this week. Much of the work so far has been done at the National Physical Laboratory and some of it has been done at temporary premises near East Kilbride.

Since the report was prepared, the first buildings completed at East Kilbride are the workshop, the boiler house, and the main part of the properties of materials laboratory. So that the most rapid progress can be made, the laboratory will be used at first as a general-purpose building available for experimental work on materials, mechanics of solids, fluid flow, heat transfer, and mechanics of formation.

An important branch of the work has been that on screw threads. Tests to investigate the influence of nut height showed that no decrease in fatigue strength occurred until the nut height was less than three quarters of the stud diameter. Extensive tests have been carried out on the strength of ½ in. dia. 10 t.p.i. threads and further tests are in progress on ½ in. dia. 20 t.p.i. threads.

Fatigue of Metals

Work on fatigue of metals is usually carried out on specimens of less than ½ in. dia. although it is not possible to predict what will happen to larger components under repeated loadings from tests on such small specimens. Tests on specimens of up to 12 in. wide of high strength aluminium alloy and mild-steel sheet have shown that a ⅞ in. dia. central drilled hole reduces the fatigue strength to a much smaller extent than does a ½ in. dia. hole. Similar work has been begun on a high-strength magnesium alloy and riveted and welded joints in this material are also being tested.

Research on Creep

Long-term research on creep is intended to achieve a greater understanding of the underlying reasons for creep and the short-term work to provide design data for such applications as steam and gas turbines. The behaviour of typical steam plant steels under peak load and temperature conditions is being studied.

Copies of the report may be obtained from H.M. Stationery Office, price 2s. 9d.

Contracts & Tenders

The Western Australian Government Railways have placed a contract with Cravens Railway Carriage & Wagon Co. Ltd. for 22 diesel railcars.

The ten first class bogie corridor coaches which, as recorded in our August 3 issue, have been ordered from Metropolitan-Cammell Carriage & Wagon Co. Ltd. by the East African Railways & Harbours will be for the Tanganyika section. The coaches are for day and night travel, and each consists of eight coupe compartments, with sleeping accommodation for two persons and seating for three; there are three lavatories. The coaches are to be of special lightweight construction.

Notes and News

Vacancy for a Civil Engineer or Designer.

—Wanted by Consulting Engineers in Westminster, a civil engineer or designer, with general experience, including railway permanent way layouts. See Official Notices on page 307.

Vacancies for Civil Engineers.—Qualified civil engineers are required at the office of the Crown Agencies for the Colonies in London in connection with the design and construction of a major bridge in East Africa. See Official Notices on page 307.

Engineer Salesman Required.—A vacancy exists on the staff of a British firm of engineers and merchants in India for an engineer salesman with railway or locomotive experience. Applicants for the post should be between 22 and 27 years of age. See Official Notices on page 307.

Conscription of Railwaymen in Norway.—Norwegian railwaymen are no longer to be exempt from military service, but in the event of mobilisation the requirements of the railways will be taken into consideration.

Railway Awards at Model Engineer Exhibition.—Among the awards made by the judges for railway models displayed at the 1951 Model Engineer Exhibition were the following: the Model Engineer Exhibition Championship Cup for Steam Locomotives: Mr. T. A. Bott of Headington, Oxford (3½ gauge L.M.S.R. "Duchess" class locomotive); Silver Medals: Mr. H. J. Refoy of Old Windsor (3½ in. gauge G.W.R. "King" class locomotive); Mr. E. H. Whittaker of Timperley (16.5 mm. G.W.R. "King" class locomotive); Bronze Medals: Mr. L. H. Cheesman of Rickmansworth (5 in. gauge G.W.R. "King" class locomotive); Mr. F. H. Higgs of

Shepperton (1½ in. gauge L.M.S.R. Class "3F" 0-6-0 locomotive); Mr. J. L. Hoskins of Par (18 mm. gauge Southern Railway Class "H" 0-4-4 tank locomotive). The Exhibition was referred to in our August 24 and 31 issues.

Canadian Pacific "Selkirk" locomotives.—In an article by Mr. G. H. Paulin in our issue of August 31, describing the "Selkirk" locomotives designed for operating passenger and freight services in Western Canada, the tractive effort of the "Tla" class 2-10-4 engine was given as 78,000 lb. This should of course read 78,000 lb.

Special Catterick Camp Trains.—As an experiment the North Eastern Region of British Railways is running four weekend leave trains at excursion fares for members of the services at Catterick Camp. A slide announcing the new trains is shown on the screen of the garrison cinema and handbills are circulated and posters displayed in the camp.

Excursions to Blackpool Illuminations.—Nearly 500 special cheap excursions, mostly in the evenings, from Lancashire and Yorkshire towns have been arranged by the London Midland Region between September 7 and October 22 for the Blackpool illuminations. There will also be many long-distance restaurant car day excursions at weekends. One from London Euston to Blackpool for 28s. return on certain Saturdays gives nine hours in the Lancashire resort.

Positions Vacant with the Queensland Government Railways.—Applications will be received by the Agent-General for Queensland, 409, Strand, London, W.C.2, until October 26, from persons wishing to join the service of the Commissioner for Railways, Brisbane, Queensland, Australia,

in the following capacities: Assistant civil engineers; railway surveyor; first grade survey draughtsman; first grade civil engineering draughtsman; designing civil engineer; assistant structural designers; structural designer; and assistant engineers, signal & telegraph engineer's section. See Official Notices on page 307.

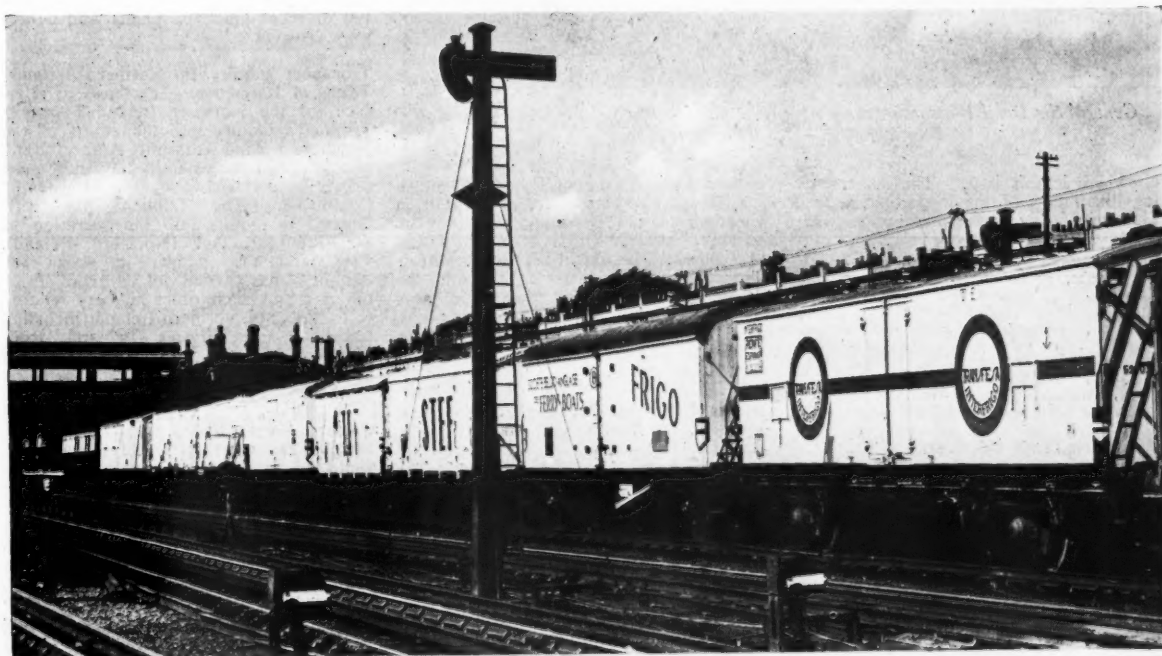
Exports to Persia.—The Board of Trade has revoked outstanding licences for the export to Persia of certain scarce goods. These cover iron and steel, including semi-manufactures such as railway track materials, non-ferrous metals, alloys, and oil.

Goods Trains in Collision at Wigton.—About midnight on September 8-9 the 5.30 p.m. mineral train from Barrow to Carlisle came into collision with the 10.25 p.m. goods train from Carlisle to Workington at Wigton, London Midland Region; no persons were injured.

British Railways Coal and Steel Carrying.—In the weekend to September 10, British Railways cleared 332,830 tons of coal from deep-mined pits and open-cast sites, making a total of 3,170,070 tons for the week. The latest figures for iron and steel show that 192,792 tons were conveyed during the week ended September 1 from the principal steelworks.

Design of Welded Structures.—Following the successful series of lectures given in London and the Midlands during the early part of this year, the Quasi-Arc Co. Ltd. has arranged for a further course on the design of welded structures to be given in London. This course, which is for structural designers and draughtsmen already familiar with structural design methods, and is intended to acquaint them with practical considerations and different methods of approach, will be held at the Institution of Marine Engineers, 85,

Refrigerator Vehicles Exhibition



Display of refrigerator vans and containers at Kensington Olympia Station. (See article in September 7 issue)

Minorities, London, E.C.3, on Tuesdays and Thursdays from 4.30 p.m. to 6 p.m., starting on October 16 and continuing until December 4. Provision has been made for practical demonstrations of arc welding to be given on one evening at the Quasi-Arc welding school at Cricklewood.

United States Interest in Cuban Railways.

—It is reported from Havana that the Darien Corporation of New York City is sending "an exploratory group" to Cuba to discuss the possibility of purchasing the British-owned United Railways. The President of Cuba indicated recently that the railway would be nationalised soon.

Visit to Darlington Works by General Sir Daril Watson.

—The visit to the North Road Locomotive Works, Darlington, by General Sir Daril Watson, Member of the Railway Executive, on September 5, as recorded last week, included the re-equipped locomotive stores, described

at present engaged in the necessary calculations. Only after these calculations are completed will it be possible to inform shareholders, the directors add, of what is likely to accrue to the company.

August Steel Output.—Steel production in August was again affected by the normal holidays in the industry and the annual rate of 13,855,000 tons compared with 14,530,000 tons a year ago. Pig iron production was at an annual rate of 9,409,000 tons as compared with 9,205,000 tons in the corresponding month of 1950.

Dunkirk Train Ferry Service Suspended.

—Train ferry services to Dunkirk from Dover have been suspended temporarily because of damaged lock gates at Dunkirk. The gates were damaged last weekend when they were jammed by a heavy log. Until further notice passenger services will operate at the usual times from Dover with boats landing at Calais, while

of the year to review the position." In April, as a result of budget increases on petrol and fuel oil, the Road Haulage Executive announced increases of 2 per cent, for distances up to 40 miles, and 3 per cent, for longer distances. The R.H.A. recommended to members a 2½ per cent, general increase. Last January a 10 per cent, increase was announced in British Road Services charges and a 7½ per cent, rise was recommended by the R.H.A.

Western Region Branch Lines Closed.

—As from September 10 the Little Somerford-Malmesbury and Plymouth Friary-Turnchapel branches of British Railways, Western Region, were closed to passenger traffic. Both branches are continuing to handle parcels traffic.

Liverpool Overhead Traffics.—There were increases in traffics of the Liverpool Overhead Railway during each week of August, and by August 26 aggregate receipts were £4,339 higher at £91,839. The greatest advance was in the week ended August 5, when receipts were up by £273 at £3,191.

Hatfield-St. Albans Branch Closure.

—On and from Monday, October 1, the passenger services will be withdrawn between Hatfield and St. Albans Abbey. The following stations and halts will be closed to passenger traffic:—Hill End; Lemsford Road Halt; Nast Hyde Halt; St. Albans London Road; Salvation Army Halt; and Smallford. London Transport bus services operate between St. Albans and Hatfield. Railway Executive cartage services will continue to be available for parcels traffic.

Eastern Region Best-Kept Stations.

—Results of the Eastern Region best-kept stations competition for 1951 have been announced. Some difficulty was experienced in deciding which stations should be awarded prizes, but the choice for the three special class awards finally fell on Elsenham, Long Stanton, and Wretham & Hockham. Favourable comment was made on the continued high standard of gardening maintained. At one station over 100 different kinds of plants and shrubs were growing.

Transport Inquiry in Northern Ireland: Terms of Reference.

—The terms of reference for the Northern Ireland Transport Tribunal's inquiry into the affairs of the Northern Ireland Transport Authority and transport matters generally have now been drawn up and signed by the Minister of Commerce. The Tribunal has been directed to inquire into the operation of the Transport Act (Northern Ireland), 1948, and the manner in which the Authority has carried out its duties under the Act and such other matters relating to transport in Northern Ireland (including transport and services to and from Northern Ireland) as may appear to the Tribunal to be relevant for the purposes of the inquiry.

Customs Formalities in International Road Freight Transport.

—The introduction on September 5 of the Carnet T.I.R. (International Road Transport Certificate) marks the successful end of three years' negotiation among eleven European countries within the framework of the United Nations Economic Commission for Europe, in collaboration with private international organisations. The procedure is based on the principle that the seal placed on goods by the Customs of one country is accepted by the officials of other countries. After the goods are



General Sir Daril Watson inspecting re-equipped locomotive stores at Darlington Works (see accompanying paragraph)

elsewhere in this issue. The accompanying illustration of the inspecting party in the rough heavy brass compound shows:—

Left to right, Messrs. B. X. Jessop, Assistant Chief Regional Officer, North Eastern Region; W. McKie, Assistant Stores Superintendent, King's Cross; and A. Forbes Smith, Stores Superintendent, Eastern and North Eastern Regions; General Sir Daril G. Watson; Messrs. C. R. Hinds, Works Manager, Darlington Locomotive Works; P. R. Hickman, Chief Officer (Stores), Railway Executive; and K. J. Cook, Mechanical and Electrical Engineer, Eastern and North Eastern Regions.

Nitrate Railways Taken Over.—The directors of the Nitrate Railways Company announce that a further stage has been reached in the implementation of the decree signed by the Chilean President last January to divest the company of the responsibility of operating the railways in terms which it was then stated should result in a surplus, after payment of debts, for the shareholders. The Chilean Government, they state, took possession of the railways as from September 1. A joint commission, created under the decree, is

motorists who have booked on the Dunkirk service will also land at Calais. The train ferry will not sail to Dunkirk until the lock has been repaired and it is expected that the gates will be out of action for two or three weeks. The sleeping cars on the "Night Ferry" service, which normally run through between London and Paris, are working between London and Calais, at which port passengers enter or leave the Paris-Calais trains.

Increase in Road Haulage Rates.

—Higher road haulage rates were announced by the National Rates Committee of the Road Haulage Association after a meeting in London on September 11. The committee stated that "the increases in running costs since the previous recommendation in May, 1951, have been such that an average increase of 3 per cent, on rates is justified from October 1 next, when the new wages scale for road haulage workers will be in force. It will be necessary for many hauliers to obtain this increase from their customers forthwith and the National Rates Committee will meet before the end

OFFICIAL NOTICES

CROWN AGENTS FOR THE COLONIES

PROFESSIONALLY qualified Civil Engineers required at the office of the Crown Agents for the Colonies in London, in connection with the location, design and construction of a major bridge in East Africa. (1) One Engineer; (2) one or more Assistant Engineers. The successful applicant for the first post will be required (a) to make a rapid reconnaissance of the river to be crossed and select likely sites, then return to the United Kingdom; and (b) to lead a party of Surveyors to make detailed surveys of, and to put down borings at, the site so selected; he will then return to the office of the Crown Agents and assist in preparing preliminary designs and estimates, subsequently in preparing final designs and contract documents; (c) he may be required subsequently to supervise the construction by contract. He should have had considerable experience in siting major road or railway bridges and conducting detailed surveys and site investigation leading up to the design. Experience in actual design, including heavy foundations, and construction in primitive tropical conditions would be an advantage. The successful applicants for the second post will be required to assist operation (b) and should have had experience similar to the first post. Apply at once by letter, stating post applied for and salary required, age, full names in block letters and full particulars of qualifications and experience, and mentioning this paper, to the CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M.27777.A on both letter and envelope. The Crown Agents cannot undertake all applications and will communicate only with applicants selected for further consideration.

A VACANCY exists on the staff of an old-established British firm of Engineers and Merchants in India for an Engineer Salesman with Locomotive or Railway experience. Candidates should be between the ages of 22 and 27. Initial agreement three years. Salary £1,200 plus Provident Fund, return passages, leave, certain allowances and good prospects.—Apply Box 210, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

BOUND VOLUMES.—We can arrange for readers' copies to be bound in full cloth at a charge of 25s. per volume, post free. Send your copies to the SUBSCRIPTION DEPARTMENT, Tothill Press Limited, 33, Tothill Street, London, S.W.1.

TENDERS FOR BELL TICKET PUNCHES

CORAS IOMPAIR EIREANN invites Tenders for the purchase of 500 Bell Ticket Punches recently withdrawn from service. Further details may be obtained from the Manager, Road Passenger Section, 50, Upper O'Connell Street, Dublin. Tenders should be forwarded to the Secretary, Kingsbridge Station, Dublin, marked "Tender for Bell Ticket Punches," so as to reach him not later than 5 p.m. Wednesday, October 3, 1951. CORAS IOMPAIR EIREANN.

WE buy used or unserviceable Steel Files at good prices in lots of 2 cwt. or more.—THOS. W. WARD LIMITED, R. S. Department, Albion Works, Sheffield.

DRAUGHTSMAN required with experience of railway rolling stock, by a firm situated in North Midlands. Salary in accordance with previous experience and qualifications.—Apply Box 203, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

AN Insurance Organisation with extensive connections in the transport industry has vacancies on its outdoor staff for a number of young men. Excellent opportunities to those possessing good personality and anxious to succeed. Write stating age to Box 197, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

WANTED by Consulting Engineers in Westminster, Civil Engineer or Designer with good general experience, including railway permanent way layouts. Pay according to qualifications and experience. Write giving full particulars of age and experience to Box 5193, c/o CHARLES BARKER & SONS LTD., 31, Budge Row, London, E.C.4.

TRACTION ENGINEERS are required by a well-known manufacturer for control design or general project engineering. Applicants must be qualified engineers and have served a recognised apprenticeship. A requirement is experience in the design, manufacture or operation of electric or diesel-electric traction equipment. Write, in confidence, giving full details of previous experience, mentioning ref. DEA to Box 204, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

AUSTRALIA

QUEENSLAND GOVERNMENT RAILWAYS

POSITIONS VACANT

APPLICATIONS will be received by the undersigned until October 26, 1951, from persons desiring to join the service of the Commissioner for Railways, Brisbane, Queensland, Australia, in the following capacities:—ASSISTANT CIVIL ENGINEERS.—Present salary range A£765 10s. to A£895 10s., plus A£26 p.a. instrument allowance. RAILWAY SURVEYOR.—Present salary range A£895 10s. to A£1,020 10s., plus A£36 p.a. instrument allowance. FIRST GRADE SURVEY DRAUGHTSMAN.—Present salary range A£712 10s. to A£845 10s. p.a. FIRST GRADE CIVIL ENGINEERING DRAUGHTSMAN.—Present salary range A£712 10s. to A£845 10s. p.a. DESIGNING CIVIL ENGINEER.—Present salary range A£845 10s. to A£970 10s. p.a. ASSISTANT STRUCTURAL DESIGNERS.—Present salary range A£723 10s. to A£845 10s. p.a. STRUCTURAL DESIGNER.—Present salary range A£845 10s. to A£970 10s. p.a. ASSISTANT ENGINEERS, SIGNAL & TELEGRAPH ENGINEER'S SECTION, CHIEF ENGINEER'S BRANCH, LIGHTING AND POWER SUBSECTION.—Present salary range A£723 10s. to A£845 10s. p.a. ASSISTANT ENGINEER, SIGNAL & TELEGRAPH ENGINEER'S SECTION (SIGNALLING).—Present salary range A£723 10s. to A£845 10s. p.a. Persons who are desirous of appointment to any of the above positions should apply to me for full particulars concerning duties, qualifications, conditions of service, etc. L. H. PIKE, Agent-General for Queensland, 409, Strand, London, W.C.2.

JUNIOR TRAFFIC OFFICIALS with railway traffic apprenticeship experience. Age about 25, single, required for service on railways in Peru and Bolivia. Apply to the Secretary of the PERUVIAN CORPORATION LIMITED, 144, Leadenhall Street, London, E.C.3.

INTERNATIONAL RAILWAY ASSOCIATIONS. Notes on the work of the various associations concerned with International traffic, principally on the European Continent. 2s. By post 2s. 2d. *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

sealed in the country of origin, the driver of the vehicle concerned is issued with a T.I.R. certificate by the Customs, with which he passes the frontier without further Customs formalities until arrival at destination. A plate bearing the letters T.I.R. is fitted to the vehicle concerned. The T.I.R. system is at present applied in Holland, Switzerland, and Western Germany, but is expected to apply in other countries in the near future.

Breakdown Van for New South Wales Railways.—A petrol-engine Leyland Comet haulage chassis, built by Leyland Motors Limited, forms the basis of a vehicle recently produced by the Department of Railways of New South Wales. It is specially designed and built for carrying breakdown gangs and equipment to derailments of railway stock. Built in the railway workshops, the vehicle has two separate compartments, and a steel floor is incorporated to take the weight of jacks and heavy repair equipment. The human element is catered for by the provision of separate lockers for clothes and food and the latter have an air intake to the outside of the body. The 14 ft. 2 in. wheelbase chassis is fitted with an Eaton two-speed axle, which has a spiral bevel drive for the high-speed ratio, and an epicyclic gear-train reduction for the low-speed ratio.

Fund Requirements for Kenya Development.—Kenya needs between nine and ten million pounds sterling for development projects but does not know where to turn for the money, according to Major-General Sir Philip Mitchell, Governor of the Colony. "The position is causing much anxiety," he said. "We still have a road system which is rudimentary in terms of modern transport. Port accommodation is by no means adequate and railway development is urgently needed." Any

scheme for the development of mining or agriculture by private enterprise in Kenya raised its capital in London, the Governor added. Finance for investment in Government securities was a different matter and there was a limit to the amount which could be raised in London for that purpose.

Finnish Passenger Traffic Cut.—An agency message states that passenger traffic on the

Finnish State railways will be cut by 20 per cent. from October 1 because of shortage of fuel and increasing goods traffic.

Murex Limited.—The total value of the consolidated sales of Murex Limited for the year to April 30 last at £9,730,000 compares with £6,820,000 in the previous year. The directors state that the greater part of the increase was due to higher selling prices, necessitated by increased costs of



Breakdown van built in the New South Wales Government Railways workshops on Leyland Comet chassis (see accompanying paragraph)

raw materials, though there was a satisfactory increase in the physical volume of business. Trading profits of the group rose to £1,860,783 from £905,494, and net profits, after allowing £890,626 against £382,672, for tax, to £759,110, as compared with £350,268. Net profit of the parent company was £684,905, against £321,399.

E.C.A. Mission to Spain.—An E.C.A. study group and a military survey team from the U.S.A. are in Spain to investigate Spanish economic needs and defences. Among the questions to be discussed will be the improvement of the railway system.

Northern Aluminium Co. Ltd.: Head Office.—The Northern Aluminium Co. Ltd. announces that as from October 1 the address of its head office, and also its London sales office, will be Bush House, Aldwych, London, W.C.2: Telephone No. Temple Bar 8430.

Future of Connah's Quay.—Negotiations to avert closure of the port at Connah's Quay, L.M.R., have been in progress between the Railway Executive and local bodies. The Railway Executive announced almost a year ago that it intended to abandon the maintenance of the port because of reduced traffic. The port can only be used for ten working days each month, because of the tides, but if plans for dredging and rebuilding were carried out, ships of 2,000 tons would be able to load and discharge. In view of recent increases in traffic, local interests have pressed the Railway Executive to postpone closure pending possible traffic developments.

Western Region Ambulance Centre.—As a result of recommendations made by British Railways, Western Region, Ambulance Centre, the following members of the staff have been admitted to the Order of St. John of Jerusalem in the Grade of Serving Brother:—Messrs. J. H. Blundy, Plankeeper, Chief Engineer's Office, Paddington; A. H. Hole, Checker, Commercial Department, Bristol; L. Yendall, Signaller, Operating Department, Chard; G. Mitchell, Ticket Collector, Operating Department, Dawlish. The following have been awarded the Vellum Vote of Thanks of the Order:—Mr. R. J. Berry, Charge-man Erector, Mechanical & Electrical Engineer's Department, Swindon; Mr. W. G. Morse, Telegraph Lineman, Signal & Telegraph Department, Swindon Junction.

Railway Stock Market

Although firm, markets attracted only moderate business, because of a general tendency to await the decision as to whether we are to start repaying the 1946 U.S. loan which would cost \$138 million, in December. Latest Persian oil developments also affected sentiment. British Funds have been inclined to strengthen, partly on revived talk of the possibility that a defence loan may be floated, although this is not generally expected until next year, and meanwhile new issues in the gilt-edged market are likely to be confined to further small Colonial loans. Although British Transport may also have to raise more money no early issue of new stock is expected. Industrial shares have come in for only moderate attention, partly because of dividend limitation. Although financial results coming to hand show higher profits in many cases, they of course relate mainly to 1950, when the export trade was particularly good; and company chairmen are warning that conditions are changing. Rising costs are cutting profit margins in many directions. The inference is that falling earnings will force reduced dividends next year from some companies and because of the dividend "freeze" investors will not be able to receive higher payments from companies which do well. In the circumstances it is perhaps not surprising that overseas securities have continued to attract increased attention.

Foreign rails were again more active, particularly Canadian Pacifics, which changed hands at the new high record level of 67, but have eased slightly to 66½. The market is continuing to talk of prospects of a higher dividend partly because of expectations of a bigger return from Canadian investments. The main factor attracting attention is the important oil developments.

Leopoldina Terminal 5 per cent. debentures jumped three points to 94, and the ordinary units were better at 1s. 4½d., following the provisional agreement to sell to a Brazilian group its main asset for about £570,000, roughly a third of which would be paid six months after signing a sale agreement, and the balance over 5½ years. Leopoldina Railway stocks were better in the belief that the technical "hitch" which the Brazilian authorities say has arisen in connection with the release of the £10,000,000 for the railway, will be settled and that there therefore seems no reason

for further delay by Brazil. Hopes have been revived therefore that stockholders may receive their long-awaited "pay-out" by the end of the year. At the time of writing Leopoldina ordinary has been firmer at 10½, the preference strengthened to 26, the 4 per cent. debentures to 94½, and the 6½ per cent. debentures to 138.

Antofagasta ordinary firmed up to 15½, and the preference to 73½. United of Havana stocks eased again, awaiting news of the nationalisation terms; the 1906 debentures were back to 20½. Rumours that, because Cuba might find difficulty in financing a take-over deal, an offer might be made by American interests for United of Havana, was denied last week. In other directions San Paulo 10s. units have changed hands around 14s. Nitrate Rails were 23s. 9d. and Taltal 19s. Mexican stocks remained more active with National of Mexico 4½ per cent. non-assented at 42½. Bolivar "C" debentures kept at 77 and La Guaira ordinary stock was 92. Signing of the Japanese peace treaty tended to strengthen Manila Rails; the "A" debentures were 82 and the preference shares improved to 10s. 3d. French railway sterling bonds strengthened and Midi and Orleans both improved to 90. White Pass Yukon 5 per cent. debentures were 207 and Algoma Central 5 per cent. debentures were 249.

Engineering shares showed a number of good features. Guest Keen continued active around 64s. 6d. John Brown advanced to 49s. 9d. on further consideration of Lord Aberconway's recent speech indicating the successful expansion of interests to make good the nationalisation of its steel works. Ruston & Hornsby were 37s. 6d. and Vickers rallied to 49s.

Hurst Nelson, at 57s. 6d., were firm on the report and accounts. Birmingham Carriage changed hands around 37s. 6d., Vulcan Foundry were better at 27s. 3d., Beyer Peacock 31s., Gloucester Wagon 16s., North British Locomotive 18s. 1½d., T. W. Ward 70s., and Wagon Repairs 5s. shares 14s. 9d., while Charles Roberts, after easing, rallied to £5.

EAST GERMAN RAILWAYS TO USE SOFT COAL.—An agency message from Berlin stated that all locomotives in East Germany still running on hard coal must be converted to burn soft coal or soft coal dust because of the loss of much of the previous supplies.

Forthcoming Meetings

September 15 (Sat.).—Railway Students' Association, coach tour leaving Dorking North Station at 2 p.m.

September 15 (Sat.).—Permanent Way Institution, Manchester & Liverpool Section, in the Temperance Institute, London Road, Southport, at 2.30 p.m. "Relaying," by Mr. W. Cliffe.

September 19 (Wed.).—Institution of Locomotive Engineers, at the Institution of Mechanical Engineers, Storey's Gate, London, S.W.1., at 5.30 p.m. "Dynamic Braking for Steam, Diesel and Gas Turbine Locomotives," by Mr. J. Koffman.

September 19 (Wed.) & 20 (Thur.).—International Design Congress, sponsored by the Council of Industrial Design, at the Royal College of Art, Kensington.

September 26 (Wed.) to October 6 (Sat.).—European Timetable and Through Carriage Conference at Oslo, Norway.

Traffic Table of Overseas and Foreign Railways

	Railway	Miles open	Week ended	Traffics for week		No. of week	Aggregate traffics to date			
				Total this year	Inc. or dec. compared with 1949/50		Total	Increase or decrease		
							1950/51			
South & Cen. America	Antofagasta ...	811	31.8.51	£ 127,760	+	£ 22,300	35	£ 4,148,870	+	£ 1,940,136
	Costa Rica ...	281	June, 1951	cl. 121,590	+	c25,461	52	cl. 1,300,123	+	c720,146
	Dorada ...	70	July, 1951	37,711	—	1,667	30	251,471	—	19,079
	Inter. Ctl. Amer. ...	794	July, 1951	\$1,039,745	—	\$53,042	30	\$7,971,396	—	\$152,622
	Paraguay Cent. ...	274	24.8.51	/364,540	+	£178,639	8	\$2,663,985	+	£1,223,493
	Peru Corp. ...	1,050	Aug., 1951	\$8,659,000	+	\$529,000	9	\$16,584,000	+	\$979,000
	" (Bolivian Section)	66	Aug., 1951	Bs. 13,962,000	+	Bs.6,308,000	9	Bs. 26,991,000	+	Bs. 11,506,000
	Salvador ...	100	May, 1951	cl.38,000	+	c31,000	48	cl.867,000	+	cl.136,000
	Taltal ...	147	Aug., 1951	\$2,065,000	+	\$528,500	9	\$3,885,000	+	\$1,086,600
	Canada	Canadian National†	23,473	July, 1951	17,681,000	+	895,000	30	117,434,000	+
Canadian Pacific†		17,037	July, 1951	11,932,000	+	873,000	30	80,924,000	+	10,763,000
Various	Barsi Light* ...	167	July 1951	55,627	+	9,833	17	168,750	+	33,705
	Egyptian Delta ...	607	10.4.51	17,513	—	267	4	17,513	—	267
	Gold Coast ...	536	July, 1951	254,368	+	17,091	17	1,058,909	+	99,114
	Mid. of W. Australia	277	June, 1951	43,627	+	8,943	52	497,706	+	117,766
	South Africa ...	13,398	11.8.51	1,781,587	+	213,601	19	35,806,454	+	5,116,698
	Victoria ...	4,744	Apr., 1951	1,793,401	+	71,930	43	—	—	—

* Receipts are calculated at 1s. 6d. to the rupee

† Calculated at \$3 to £1